

The Mining Journal AND ATMOSPHERIC RAILWAY GAZETTE,

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 525.—VOL. XV.]

London: Saturday, September 13, 1845.

[PRICE 6D.

VALUABLE MINE MATERIALS AND COUNTING-HOUSE FURNITURE, &c., FOR SALE.—Messrs. W. RICHARDS and G. H. BELLINGER, auctioneers, have received instructions to offer for sale, by public auction, on Monday, the 15th day of September inst., by ten o'clock in the forenoon, at WHEAL PRUDENCE MINE, in the parish of St. Agnes, Cornwall, the under-mentioned **VALUABLE MINING MACHINERY AND MATERIALS**, all of which are nearly new—viz.: one excellent 50-inch CYLINDER PUMPING-ENGINE, with two boilers, together about 164 tons, one of which is nearly new; one new steam-whim 26-in. cylinder, and one new boiler nine and a half tons, with crushing apparatus attached; capstan and shears; about 134 fathoms of 14, 13, 12, 10, and 7-inch pumps; H-pieces and doors; windores; about fourteen tons of tough iron rod-pieces; clock seat-pieces and glands; poles; pole cases; shifting boxes; brass valves and seats; working barrels; wood and iron rods; angle and balance bolts; tramroad iron; 11, 7, and 6-inch capstan ropes; 44-inch flat ropes; tram wagons; whale kibbles; mandril; hanging yokes; two horse-whims; ladders; and a large quantity of iron, &c. A dial and quadrant with revolving plate, &c., and telescope attached, by Wilton. Also, all the smith's tools, and comprising 42 and 49-inch bellows, three anvils, three vices, two drop screws, &c., and all the miners' tools; with a great quantity of timber in whole, half, and quarter pieces. Also, the timber of the bridge to the island shaft; and all the counting-house furniture. The whole are in excellent condition, and will be sold without reserve.

For viewing the materials apply to Mr. John Cartew, on the mine; and, for further particulars, to the auctioneers: Mr. M. T. Hitchens, St. Agnes; or to Mr. R. V. Davy, the purser, at Penzance. Penzance, September 1.

ESTATE IN LANARKSHIRE, desirable as a RESIDENCE and INVESTMENT, and embracing a large MINERAL FIELD.—TO BE SOLD, BY PUBLIC AUCTION, within the Royal Exchange Sale Room, Glasgow, on Wednesday, the 17th September next, at Two o'clock in the afternoon, the

ESTATE OF AUCHINGRAY AND WHITESIDE, situated in the parishes of New Monkland and Shotts—twenty-six miles from Edinburgh, and sixteen from Glasgow, containing between 2000 and 3000 Scotch acres, as formerly advertised at greater length.

For particulars apply to R. Haldane, Esq., W.S., 43, North Castle-street, Edinburgh. Mr. Russell of Eastfield, will give every local information, and the property will be shown on application at the "House of Auchingray."

Messrs. Mitchell, Henderson, and Mitchell, writers, Glasgow, will also afford information to intending purchasers.

Positive and unreserved Sale of a High-Pressure Locomotive Steam-engine, upwards o

twelve horses' power, with under carriage, &c., complete.

TO BE SOLD, BY AUCTION, by Mr. J. W. SHAW, most positively, and without the least reserve, on Saturday, the 20th Sept. inst., at half-past Eleven o'clock forenoon, on the premises belonging to Mr. Leslie, machinist, situated in Stanley-street, Salford, a HIGH-PRESSURE LOCOMOTIVE STEAM-ENGINE, upwards of twelve horses' power, with under carriage and wheels—the whole in capital working condition, having recently been completely refitted, at a very considerable expense, and may, at a small expense, be applied as a stationary engine for pumping, and other purposes.

May be seen any day prior to the sale, by applying on the premises; and for any further information, apply to the auctioneer, 29, Princess-street, Manchester.

SALE OF A LARGE FOUNDRY IN FRANCE.—ON THURSDAY, the 16th of October next, will be SOLD, BY PUBLIC AUCTION, according to a notice issued by the First Chamber of the Civil Tribunal of the Seine, at the Palais of Justice of Paris, the following valuable PREMISES, most suitable to any enterprising company or party who would wish to carry on an extensive business in the construction of STEAM-ENGINES, MACHINERY, &c., which would be a most lucrative speculation.

The extensive manufactory of LA CHAPELLE, SAINT DENIS, near Paris, for the construction of large steam apparatus for marine navigation and rivers, steam mills, locomotives, &c. This building, from special plans, is on a surface of 15,000 metres, of which 5000 are in working buildings, and consist principally, in a dwelling residence-workshop for the making of steam-engines, and every description of powerful machinery.—Forges, furnaces, or ovens, battering hammers of the force of 15-horse power—workshops for the making of boilers, with ovens—forges, and every necessary implement—factory for fitting up machines of the largest dimensions, and for locomotives and an iron railway, communicating from one part of the building to the other—exhibiting a good supply of water, heat, and gas for lighting. Numerous models—in fact, every thing that constitutes one of the most important, best organised, and most useful establishments in France. It is situated between the Canal de l'Ourcq and the landing place and warehouse for merchandise of Saint Ouen, at the distance of 300 metres from the Northern railway, between the terminus and the goods landing place.—To be sold immediately.

LOT I.—The large and handsome MANSION, with a court-yard and garden, occupied at present as a boarding school, situated at No. 7, Rue de l'Assomption, Poissonniere, at Paris, giving a yearly rental of 7500 fr.—£500. The following are the upset prices:

First Lot 400,000 fr.—£21,000.

Second ditto 90,000 fr.—£4,500.

For further particulars apply to M. Yves, Precheur, solicitor, residing at 317, Rue Saint Honore, Paris; M. Brachet, solicitor, 89, Rue Richelieu, and on the premises.

Saint Neot.

VALUABLE SLATE QUARRY TO BE LET.—TO BE LET, BY PRIVATE CONTRACT, for a term of fourteen or twenty-one years, as may be agreed on, from Michaelmas, 1846, all that valuable SLATE QUARRY, situated at WOODLANDS, in the parish of St. Neot, in the county of Cornwall, and now in the occupation of Mr. William Sweet. The quarry is situated in the immediate neighbourhood of a large and increasing mining district, within one mile of the proposed line of railway from Plymouth to Falmouth, and about six miles distant from the towns of Liskeard and Bodmin, and near the turnpike-road uniting those towns. It is approached by excellent roads, and is at all times supplied with a stream of water, capable of working powerful machinery. The slate is of superior quality, and continues to improve, and is likely to be of unlimited extent.

Persons with moderate capital will find this as excellent opportunity of realising a large return of profits.—The taker (should he desire it) will be allowed to enter at once upon fresh ground.

For viewing the premises, application should be made to Mr. William Sweet, of Combe House, St. Neot (the present occupier); and for further particulars, and to treat for the same, to Mr. Pedler, solicitor, Liskeard.—Liskeard, Aug. 22, 1845.

TO THE PROPRIETORS OF LEAD AND SILVER MINES.—WANTED, A SITUATION AS REFINER OF SILVER OR LEAD ORES, by a person who is well qualified for undertaking the office. The advertiser can give most unquestionable references as to character and ability.—N.B. Has no objection to go abroad.—Address: "X. Y. Z." Cambrian Newspaper Office, Swansea.

TO THE PROPRIETORS OF LEAD AND SILVER MINES.—The directors of the COMBARTIN AND NORTH DEVON SMELTING COMPANY are ready to RECEIVE SAMPLES, and to TENDER for the PURCHASE OF LEAD AND SILVER ORES.

A GENTLEMAN OF PROPERTY, who possesses large VEINS of BLACK BEMATITE and OTHER IRON ORES, well situated for a general trade, is desirous to find an active intelligent PERSON TO CONTROL and CARE FOR SOME WORKS now commenced. He must have a knowledge of mining and of smelting various ores, and must be capable of keeping the accounts and controlling the concern. Any gentleman of active habits wishing to EMBARK A MODERATE CAPITAL in such an undertaking, who may have the same secured to him at an INTEREST, and, furthermore, a SALARY for his services.—Apply to "A. G. B.", Post office, Dunstable.—Merit.—First-rate references will be required.

NOTICE TO INVENTORS.—OFFICE FOR PATENTS OF INVENTIONS AND REGISTRATIONS OF DESIGNS, 14, LINCOLN'S INN-FIELDS.—The printed INSTRUCTIONS gratis, and every information upon the subject of PROTECTION for INVENTIONS, either by Letters Patent or the Designs Act, may be had by applying personally, or by letter, pre-paid, to Mr. Alexander Prince, at the office, 14, Lincoln's Inn-Fields.

PREVENTION OF SMOKE AND SAVING OF FUEL.—COUPLAND'S PATENT FURNACE is confidently submitted to the public, as combining in an eminent degree the two great advantages of preventing smoke and saving fuel. The furnace is very simple, and is alike adapted for the boilers of land and marine engines, and for all purposes where a furnace is required. By its use smoke is altogether prevented, and the saving of fuel is, with the ordinary coals used for furnaces, about 20 per cent.; but, when small coals or screenings are used (for the burning of which the furnace is well adapted), the saving is very much greater. The proprietors of steam-boats will find the furnace well suited to their boilers, and as with it smoke is prevented, the nuisance and annoyance thereof to passengers will be avoided.

"We have been favoured with the inspection of Mr. Coupland's Furnace, for the consumption of smoke and saving of fuel: and we must confess that, whatever merits may be possessed by the numerous plans which have been brought forward (and we have seen them nearly all) our opinion is, that Mr. Coupland has achieved what none of them ever achieved before—not the consumption of smoke, for there is none to consume—but the complete and thorough oxidation of the fuel, none of it going off in streams of solid carbon, but in those invisible gases the result of perfect combustion—viz., carbonic and sulphurous acids, the vapour of water, &c. . . . The simplicity of the machinery for performing the necessary operation, is another recommendation in favour of this plan; it does not require any power from the engine, but is merely a hand operation, performed with the greatest ease; and the machinery is quite away from the action of the fire. . . . We cannot help thinking, if a commission is appointed by Parliament to ascertain and report on the best smoke consuming (as it is termed) furnace that the one under notice must be successful."—*Mining Journal*, July 19, 1845.

"The Furnace may be seen in operation on Mondays and Thursdays, between Ten and Four, at the Manufactory of Mr. Coupland, Pond-yard, Bankside, Southwark (near Southwark Bridge), of whom a prospectus and further information may be obtained."

TO CAPITALISTS.—CARMARTHENSHIRE AND GLAMORGANSHIRE, SOUTH WALES.—The AGENT of an extensive ESTATE calls the attention of IRONMASTERS, COLLIERs, MANUFACTURERS, FARMERS, and CAPITALISTS in general, to this announcement. He is prepared to enter into arrangements with respectable parties for the LEASING, on long terms, of various descriptions of PROPERTY, now the objects of public attention—sandstone, bituminous and steam coal, culm, ironstone, limestone, marble, flag, and other quarries; fire clay and brick earth, sites for building at and near a flourishing and fast-rising commercial town, seaport and floating dock, for manufacturers, ship-building yards, wharves, stores and dwelling-houses; and in the coal and iron districts sites for works joining a railroad and canal, leading by their main trunks and branches to three seaports—water-power is also general. Situations for rural and marine residences in the most beautiful parts of the country, commanding views of Swansea and Carmarthen Bays and the back mountain, with good roads, cheap markets, and daily communication with Bristol, Gloucester, and the metropolis. The sportsman will find his pursuits rewarded with woodcock, snipe, and other game in winter; and, in summer, trout, salmon, and the much esteemed sea-
fish peculiar to the principality.

The estate, containing 12,000 acres, is situated in twenty-four parishes, offering every variety of soil and scenery to the admirer of the picturesque, and numerous objects of interest to the geologist.

As an inducement to capitalists to embark in such agricultural improvements, as draining, planting, erection of proper homesteads, &c., which now so deservedly occupy public attention, leases of ninety-nine years (a term usually confined to building leases) will be granted for these purposes.

Cheap food, cheap labour, cheap fuel, and cheap raw material of every description, will give the manufacturer an advantage over every other part of Great Britain; while the large and still increasing trade in coal affords an intercourse with all parts of the world for the transmission of raw materials from other localities at cheap rates, and for forwarding to their destination the manufactured articles.

This more particularly applies to those undertakings where the consumption of coal forms a principal ingredient. The South Wales Railway will pass through the town and the three seaports, and through near a large proportion of the estate near the sea coast, while the contemplated Welsh Midland Railway will bring the collieries, ironstone, limestone, and other quarries within an easy distance of the agricultural counties of Hereford and Worcester, and the great chain of railway communication connecting Birmingham, Liverpool, Manchester, and all the important manufacturing districts of England.

For further particulars apply to Mr. F. L. Brown, solicitor, Llanelli, Carmarthenshire; or to Mr. John Williams, solicitor, 1, Verrall-buildings, Gray's Inn, London.

SHAMONI MINING COMPANY (en commandite)—under the DIRECTION of Messrs. FERRERE, BROTHERS, and Co., of Paris.

Capital £300,000, or 5,000,000 fr., in 50,000 shares, of £4, or 100 fr., each.

Deposit £1, or 25 fr., per share.

Applications for prospectuses and shares may be addressed, in Paris, to the office of the company, 39 bis, Rue de la Ferme; in London, to the company's agency, 7, Tokenhouse-yard, Lothbury; in Liverpool, to Mr. Manuel Blandin; in Antwerp, to Messrs. De Cock and F. Bischoff, for Belgium.

For further particulars apply to Mr. F. L. Brown, solicitor, Llanelli, Carmarthenshire; or to Mr. John Williams, solicitor, 1, Verrall-buildings, Gray's Inn, London.

Positive and unreserved Sale of a High-Pressure Locomotive Steam-engine, upwards o

twelve horses' power, with under carriage, &c., complete.

TO BE SOLD, BY AUCTION, by Mr. J. W. SHAW, most

positively, and without the least reserve, on Saturday, the 20th Sept. inst., at half-past Eleven o'clock forenoon, on the premises belonging to Mr. Leslie, machinist, situated in Stanley-street, Salford, a HIGH-PRESSURE LOCOMOTIVE STEAM-ENGINE, upwards of twelve horses' power, with under carriage and wheels—the whole in capital working condition, having recently been completely refitted, at a very considerable expense, and may, at a small expense, be applied as a stationary engine for pumping, and other purposes.

May be seen any day prior to the sale, by applying on the premises; and for any further information, apply to the auctioneer, 29, Princess-street, Manchester.

SALE OF A LARGE FOUNDRY IN FRANCE.—ON THURSDAY, the 16th of October next, will be SOLD, BY PUBLIC AUCTION,

according to a notice issued by the First Chamber of the Civil Tribunal of the Seine, at the Palais of Justice of Paris, the following valuable PREMISES, most suitable to any enterprising company or party who would wish to carry on an extensive business in the construction of STEAM-ENGINES, MACHINERY, &c., which would be a most lucrative

speculation.

LOT I.—The extensive manufactory of LA CHAPELLE, SAINT DENIS, near Paris, for the

construction of large steam apparatus for marine navigation and rivers, steam mills, locomotives, &c. This building, from special plans, is on a surface of 15,000 metres, of which 5000 are in working buildings, and consist principally, in a dwelling residence-workshop for the making of steam-engines, and every description of powerful machinery.—Forges, furnaces, or ovens, battering hammers of the force of 15-horse power—workshops for the making of boilers, with ovens—forges, and every necessary implement—factory for fitting up machines of the largest dimensions, and for locomotives and an iron railway, communicating from one part of the building to the other—exhibiting a good supply of water, heat, and gas for lighting. Numerous models—in fact, every thing that constitutes one of the most important, best organised, and most useful establishments in France. It is situated between the Canal de l'Ourcq and the landing place and warehouse for merchandise of Saint Ouen, at the distance of 300 metres from the Northern railway, between the terminus and the goods landing place.—To be sold immediately.

LOT II.—The large and handsome MANSION, with a court-yard and garden, occupied at present as a boarding school, situated at No. 7, Rue de l'Assomption, Poissonniere, at Paris, giving a yearly rental of 7500 fr.—£500. The following are the upset prices:

First Lot 400,000 fr.—£21,000.

Second ditto 90,000 fr.—£4,500.

For further particulars apply to M. Yves, Precheur, solicitor, residing at 317, Rue Saint Honore, Paris; M. Brachet, solicitor, 89, Rue Richelieu, and on the premises.

Saint Neot.

VALUABLE SLATE QUARRY TO BE LET.—TO BE LET, BY PRIVATE CONTRACT,

for a term of fourteen or twenty-one years, as may be agreed on, from Michaelmas, 1846, all that valuable SLATE QUARRY, situated at WOODLANDS, in the parish of St. Neot, in the county of Cornwall, and now in the occupation of Mr. William Sweet. The quarry is situated in the immediate neighbourhood of a large and increasing mining district, within one mile of the proposed line of railway from Plymouth to Falmouth, and about six miles distant from the towns of Liskeard and Bodmin, and near the turnpike-road uniting those towns. It is approached by excellent roads, and is at all times supplied with a stream of water, capable of working powerful machinery. The slate is of superior quality, and continues to improve, and is likely to be of unlimited extent.

Persons with moderate capital will find this as excellent opportunity of realising a large return of profits.—The taker (should he desire it) will be allowed to enter at once upon fresh ground.

For viewing the premises, application should be made to Mr. William Sweet, of Combe House, St. Neot (the present occupier); and for further particulars, and to treat for the same, to Mr. Pedler, solicitor, Liskeard.—Liskeard, Aug. 22, 1845.

TO THE PROPRIETORS OF LEAD AND SILVER MINES.

WANTED, A SITUATION AS REFINER OF SILVER OR LEAD ORES, by a person who is well qualified for undertaking the office. The advertiser can give most unquestionable references as to character and ability.—N.B. Has no objection to go abroad.—Address: "X. Y. Z." Cambrian Newspaper Office, Swansea.

TO THE PROPRIETORS OF LEAD AND SILVER MINES.

The directors of the COMBARTIN AND NORTH DEVON SMELTING COMPANY are ready to RECEIVE SAMPLES, and to TENDER for the PURCHASE OF LEAD AND SILVER ORES.

A GENTLEMAN OF PROPERTY, who possesses large VEINS of BLACK BEMATITE and OTHER IRON ORES, well situated for a general trade, is desirous to find an active intelligent PERSON TO CONTROL and CARE FOR SOME WORKS now commenced. He must have a knowledge of mining and of smelting various ores, and must be capable of keeping the accounts and controlling the concern. Any gentleman of active habits wishing to EMBARK A MODERATE CAPITAL in such an undertaking, who may have the same secured to him at an INTEREST, and, furthermore, a SALARY for his services.—Apply to "A. G. B.", Post office, Dunstable.—Merit.—First-rate references will be required.

NOTICE TO INVENTORS.—OFFICE FOR PATENTS OF INVENTIONS AND REGISTRATIONS OF DESIGNS,

14, LINCOLN'S INN-FIELDS.—The printed INSTRUCTIONS gratis, and every information upon the subject of PROTECTION for INVENTIONS, either by Letters Patent or the Designs Act, may be had by applying personally, or by letter, pre-paid, to Mr. Alexander Prince, at the office, 14, Lincoln's Inn-Fields.

PREVENTION OF SMOKE AND SAVING OF FUEL.

COUPLAND'S PATENT FURNACE is confidently submitted to the public, as

combining in an eminent degree the two great advantages of preventing smoke and saving fuel. The furnace is very simple, and is alike adapted for the boilers of land and marine engines, and for all purposes where a furnace is required. By its use smoke is

altogether prevented, and the saving of fuel is, with the ordinary coals used for furnaces, about 20 per cent.; but, when small coals or screenings are used (for the burning of which the furnace is well adapted), the saving is very much greater.

The proprietors of steam-boats will find the furnace well suited to their boilers, and as with it smoke is

prevented, the nuisance and annoyance thereof to passengers will be avoided.

"We have been favoured with the inspection of Mr. Coupland's Furnace, for the

consumption of smoke and saving of fuel: and we must confess that, whatever merits may be possessed by the numerous plans which have been brought forward (and we have seen them nearly all) our opinion is, that Mr. Coupland has achieved what none of them ever

achieved before—not the consumption of smoke, for there is none to consume—but the

complete and thorough oxidation of the fuel, none of it going off in streams of solid carbon,

but in those invisible gases the result of perfect combustion—viz., carbonic and sulphurous acids, the vapour of water, &c. . . . The simplicity of the machinery for performing the

COAL-FIELDS OF CANADA AND THE UNITED STATES.—The coal-fields of the United States and the British possessions in Canada are, beyond all comparison, the most extensive and most valuable of any at present known in the world; and the geological position of these deposits of vegetable matter, as well as the conditions under which they occur, are matters of very considerable importance to the future interests of the continent of America. The great coal fields of the United States are the Appalachian, the Illinois, and the Michigan: those of the Canadas are on the eastern extremity of the colony, and occupy a great space in New Brunswick, Prince Edward's Island, Cape Breton, &c. A large proportion of the coal is anthracite. It is not very easy to do justice to these formations by the hasty sketch to which our limits necessarily confine us in this place; but some idea may be formed of their extent, when it is stated that the Appalachian coal fields extend for a distance of 720 miles from north-east to south-west, with a width in some places amounting to 180 miles—its superficial area is calculated at 63,000 miles;—that the Illinois basin is not much inferior in dimensions to the whole of England; that the Michigan coal-fields and the coal-fields of Canada are also of very considerable dimensions; and that the thickness of the seams of fossil vegetable matter in some instances exceeds even that of the Staffordshire coal, amounting at the Lehigh summit mine (where the usually intervening shales and grit have thinned out) to one mass of fifty feet without any greater interpolated matter than two thin layers of clay. In some places this vast bed is quarried in the open air; but in others where the coal is accessible to a degree scarcely to be imagined by strangers to the conditions of the country, the time has not yet arrived when the value of its fuel is appreciated.—*Quarterly Journal of the Geological Society.*

THE GRAND LONDON AND DUBLIN APPROXIMATION RAILWAY.—Under this title a company is formed, for the construction of a line of railway between London and Holyhead, for the purpose (in connection with a fleet of well-conducted and rapid steam-boats) of enabling travellers to complete the entire distance, from London to Dublin, in ten hours. This line is proposed to be constructed on a route different from any which has yet been taken up for a direct, or approximation, Dublin line; commencing at Farringdon-street, it will proceed by a tunnel to the Great Western Railway Station at Paddington, from whence it would proceed by Rickmansworth, Chesham, Wendover, and Aylesbury, thence by Bicester and Deddington to Banbury, from the latter place it will proceed about midway between Warwick and Worcester, cross the Birmingham and Gloucester Railway near Bromsgrove, and, after passing Kidderminster, Bridgnorth, and Wemlock, traverse the vale of Severn to Shrewsbury; from this point it will be carried by the Vale of Llangollen to Pentrefoelas, Capel Cerrig, and the Vale of Nant Francon to Bangor and Holyhead. While this route is as near and direct as it is possible to point out between London and Holyhead, it accommodates a number of populous places which have been hitherto left entirely out of the pale of railway communication: it connects, by means of the Birmingham and Gloucester Railway, the important manufacturing towns of Dudley, Bilston, Wednesbury, Walsall, and Lichfield, with the Derby and Grand Junction Railway; thus opening a new channel for traffic from the iron districts, the vast coal fields of Shropshire, and giving to those localities the most direct means of communication with the metropolis of England with North Wales and Dublin. A treaty is already in progress with a steam navigation company to run powerful steamers between Holyhead and Dublin, and as this line will be nearer by seventy miles, than by any of the existing routes, it will enable Dublin to be reached from London in ten hours, and secure two mail deliveries in a day. The company proposes to adopt low fares, and considerable improvements in the inferior carriages, some additional comforts will be also supplied to first-class passengers, and nothing will be omitted in the details of management that can render this national enterprise worthy of public support. The proposed capital is 6,000,000, in 120,000 shares of 50/- each.

READING, GUILDFORD, AND REIGATE RAILWAY.—This railway was originally registered under the title, "Devonport, Bristol, and Dover Junction Railway, from Reading and Reigate," and it was registered and announced some time before the publication, or registration, of any other line from Reading to Reigate. The publication of the names of the committee and the full prospectus was delayed, pending communications with the landholders and gentlemen in the locality of the proposed railway, and also with some of the influential companies, who would be benefited by the undertaking, with whom it was considered proper and advantageous to confer, before calling upon the public to support the project. Several similar lines having been since advertised, it has been right to give this explanation.

READING, GUILDFORD, AND REIGATE RAILWAY.—*UNITING THE GREAT WESTERN, SOUTH-WESTERN, BRIGHTON, AND DOVER RAILWAYS.*

WITH BRANCHES TO FARNHAM, ALTON, AND GODALMING.

Offices of the Company—11 King William-street.

(Provisionally Registered.)

Capital £200,000, in 40,000 shares of £50 each.—Deposit £2 2s. per share.

PROVISIONAL COMMITTEE.

The Right Hon. Lord Rossmore

The Hon. Colonel Dawson Damer, M.P.

The Hon. R. Gore, M.P.

The Hon. C. P. Villiers, M.P.

Wynne Ellis, Esq. M.P.

William Collins, Esq. M.P.

Captain Bernal Osborne, M.P.

Sir George Rich, Lowndes-street, Belgrave-square

Lord Torrington,

Henry Rich, Esq.

Henry Lewis Smale, Esq.

William Henri Thomas, Esq.

John Thomas Aiston, Esq. Liverpool

John Francis Bacon, Esq. Austinfriars, London

Thomas Heathcote Bayly, Esq. Grosvenor-place, and Brandon House, Rugby

John Ellis Bristow, Esq.

R. W. Bennett, Esq. Dover

George Best, Esq. Eastbury House, Compton, near Guildford

Calverley Richard Bewicks, Esq. Barsham House, Beccles

Charles R. Bigge, Esq. 19, Bryanstone-square

James Brand, Esq. 9, Old Broad-street

John Burgess, Esq. The Boroughreeve of Manchester

Samuel James Capper, Esq. Adelaide-place, London-bridge

R. Stephen Court, Esq. Dover

F. F. Closson, Esq. Mincing-lane

Samuel Hulme Day, Esq. Pudding-lane, and Peckham

John Eames, Esq. Ashby-de-la-Zouch

R. H. Fowler, Esq. 8, Manchester-square, and Felton, near Bristol

James Gernon, Esq. 13, Conduit-street, Bond-street

William Henry Gregory, Esq. M.P.

Robert Gibbs, Esq. Sandhurst Lodge, Surrey

Captain Hitchens, Illicote, Shipton-on-Stour

John Hodgson, Esq. Q. C. Cedars, South Lambeth, and Lincoln's Inn

Vero Clark Kemball, Esq. 6, Chester-place, Hyde-park

Stephen Lewis, Esq. Rochampton

William Lotus Lowndes, Esq. Q. C. Queen-square, and Lincoln's Inn

Charles Edward Mangles, Esq. Poyle Park, near Farnham

Frederick Mangles, Esq. Down Place, near Guildford

Captain James Patrick Macdougal, Brixton

George Marshall, Esq. Godalming

Joseph Mayer Montefiore, Esq. Worth Park, Sussex

The Comte de Morel, 15, Herford-street, Hyde-park

Raymond Pelly, Esq. Austinfriars

William Nash, Esq. Clapham Common

Captain Parsons, Esq. Exmouth

J. Riddell, Esq. Moorgate-street

David Salomon, Esq. London, and Burwood House, Tonbridge Wells

Martin Stutely, Esq. 6, Cambridge-terrace, Regent's-park

Charles Shaw, Esq. Birmingham

Charles Thomas Ward, Esq. Luton House, Bedfordshire, and Clopton

House, Warwickshire

Robert Watkins, Esq. August House, Worthing

Edward Waddilove, Esq. Leamington

James York, Esq. Wharncliffe House, St. John's-wood

With power to add to their number.

DIRECTORS.

DAVID SALOMONS, Esq. Chairman.

Joseph Mayer Montefiore, Esq.

Charles R. Bigge, Esq.

R. H. Fowler, Esq.

Frederick Mangles, Esq.

Charles Edward Mangles, Esq.

Engineer—Francis Giles, Esq.

BANKERS.

London—Messrs. Glyn, Halifax, Mills, and Co.

Guilford—Messrs. Mangles, Brothers

SOCIOISTS.

London—Messrs. Hodgson, Constance, and Noyes, Lincoln's Inn-fields

In the country—John Rand, Esq. Guildford

Henry Marshall, Esq. Godalming

“ Messrs. Patterson, Haynes, Hasbury, and Gardner,

Parliamentary Agent—J. F. Waddilove, Esq. Jersey-street.

Secretary—Joseph Mailand, Esq.

Application for prospectuses and shares may be made, in the usual form, to the

secretary, at the offices of the company, 11, King William-street; to the solicitors;

and to the following sharebrokers:—Edward Ellis and Co., Threadneedle-street;

Joshua Hutchinson and Son, Lothbury; Messrs. Thompson and Sons,

needle-street—11, King William-street, London.

In answer to several correspondents, we may reply, generally, that, for some time past we have been preparing elaborate descriptions of the several Atmospheric Systems of Railway—in doing which, and in giving the descriptions already published, we are but following out, in a more extended form the plan we have long adopted, that of laying before our readers authentic particulars of all inventions connected with mines and railways calculated to be of public benefit;—and we would have our readers particularly understand, that we are now actuated solely by a desire to aid in the advancement of a system which, when fully developed, will doubtless, from its safety and economy, supersede all others at present known. The enormous expense of working steam locomotives, from the cost of fuel, wear and tear of rails and engines, and the great weight and strength with which it is absolutely necessary to build the latter, and their appliances, renders the consideration of any plan, which has for its object the reduction of the working expenses, of the utmost importance to railway shareholders; while, from the alarming number of accidents which occur on the locomotive system, and the utter impossibility of collision (the fruitful source of these accidents) by the atmospheric plan, the question becomes one of the deepest interest to the public at large. Low fares and high speed are now the order of the day, and, as it is highly probable that the time is very near, when the cost of working an atmospheric line will not exceed 50 per cent. of that of a locomotive railway, it behoves railway proprietors, and, more particularly, directors of lines not yet commenced, to consider well the comparative merits of the two systems, before they adopt that of the locomotive, which, in a few years, will be totally unable to compete with the atmospheric plan. In making these remarks, we are not blindly biased in favour of the system; we merely express an opinion, founded on long consideration of the subject, and, in the meantime, our columns are open to all communications respecting railways, on whatever principle they may be constructed, and we warmly invite discussion on the subject, and which will very shortly become of still more stirring interest, as the Croydon experimental line will most probably be ready for opening in a few days, and other and longer lines on the atmospheric principle are rapidly progressing.

From the perusal of our last paper, our readers will have perceived, that three distinct systems, or mechanical combinations, and methods of applying the principle in operating therewith, were shown in progressive advance: first, the method as carried into practice on the Croydon Railway; secondly, the atmospheric locomotive system; thirdly, the system formed by the union of both these. By the first of the plans a propelling tube, of a given diameter, having the long slit and the flexible long valve, made up of leather and metal plates; that covered the opening, to hermetically close the pipe, through this the propelling piston was made to pass, along the whole length of the pipe, with the velocity of the train and the included column of air. By the second plan, the pistons were placed in the locomotive engine, these gave motion to the driving wheels, whose diameters required a speed of pistons of only about a seventh part of the speed of the train; these pistons moved in polished cylinders, the column of air in the tube did not move with the velocity of the train, and might recede in its opposite direction. For an equal amount of tractive force, a much less quantity of air of a given tenacity was acted upon, and this reduced the required amount of power in the stationary engines; the diameters of the propelling tubes were lessened by one-half. By the third plan, as we have said, the two former were combined; the propelling tubes were lessened by a third on each track of a double line of railway, and the power was made variable, &c. as to suit the different inclinations, or levels, of the way.

This combination of the principles, besides, admitted of greater facilities in working. The piston of the tube was an expanding one, that might be contracted, so as to admit of a retrograde movement; the additional double pistons of the first carriage could be reversed, as with the steam locomotive, and the train could thus be made to move backward as well as forward, whilst by the first plan, as effected on the Croydon line, no retreat was admissible, a means most desirable in the event of overshooting a station, and for the avoidance of danger in the possible event of collision, as in the case of a single line of railway where sidings occur.

We see, therefore, in the march of these improvements, a closer approximation to perfection, strategy in operation, well-considered provisions to meet the accruing exigencies of railway practice—not merely the initiative appliance of a dynamic force, capable of transferring a given weight from one point to another in advance of it only—not the limited means of an advance, without the possibility of a saving retreat—no sudden suspension of the traffic of a long line, by a possible fracture in one of the sections of the tube—no limited power, governed by the diameter of the tube and the area of its propelling pistons, only—but, in converse of all these contingencies, indispensable elements in railway dynamics, kept constantly in view, affording a flexibility that neutralized accruing difficulties. How well are we supported in this view of the case, by reference to the evidence adduced before the Parliamentary committee on the Berwick Railway. It was shown, that on that proposed line, by the provision made for atmospheric propulsion, with a 15-inch diameter of pipe, the stated speed and the weight of the trains capable of being moved by it, whilst it was sufficient for working the traffic on ordinary days, yet, on market days, there was so large a concentration of cattle, that the transit of the traffic could not be accomplished by the atmospheric apparatus provided. In consequence it was decided by the committee, that the *proviso* of the bill was not proved, and the line was lost to the promoters. Now, by a reference to the before-mentioned third plan of Mr. Pinkus, it will be observed, by how easy a means the *variable* power provided could have accomplished the conveyance of the suddenly augmented traffic. The additional separating valve, placed in the middle of the section of the tube, with the husbanded power described in our former paper, at once admits of the more frequent transmission of trains, without that loss of time consequent upon, first, the transference of a train, and the time consumed in the *re-exhaustion* of the tube through the whole length of the section of it.

Our readers will perceive, that in railway practice there are growing necessities, which must be met by prompt physical means, without which no system can be perfect. We pledge ourselves, that in the course of our observations, we will incontestably prove that every contingency arising in railway operations are catered for, not only with as ready a means as that of the locomotive steam-engine, but with greater certainty and security. We have yet to remark on two other varied systems of Mr. Pinkus, which will form a group, that may, in comparison with the new ones that are to follow, be termed his old systems. We hope to complete our descriptions of them to-day, at least so far as relates to a superficial review of them, until we have more leisure to exhibit data, for the cost of constructing and working each of the systems separately—these will form a desirable compensation for railway purposes. If it be asked, why the necessity of different systems, if each one was complete in itself? the answer will be found in the variable circumstances of railways, according to the face of the country through which they pass; for some of these advantageously combine with others, as auxiliaries in effecting transit, as the nature of mountainous or level countries occur. These different appliances exhibit the surprising variations and applications of atmospheric propulsion, and those who would seek to accomplish improvement by such traction, must travel over the wide field that Mr. Pinkus has occupied, and which we shall be enabled to show (though appearing much to say), embraces every form of application, physically possible, of atmospheric propulsion, through the agency of fixed engine-power. The result of untiring industry, during many years of opposition—nay, contemptuous ridicule—of some, who, if they had condescended to inquire, instead of condemning, might have discovered the practicable applications of the principle; but some of whom now, as common wreckers, *meille* for plunder.

BELFAST AND HOLLYWOOD DIRECT ATMOSPHERIC RAILWAY COMPANY.—The above is the title of a new railway which has just appeared under the most flattering auspices. Hollywood, the favourite watering-place for the inhabitants of Belfast, and, consequently, the passenger traffic, at all times great, is in the summer months immense. The proposed line, therefore, which is, we believe, principally intended for the conveyance of passengers between the respective termini, must necessarily be one of the most remunerative speculations of the day. As the line will be a very short one, the distance to be traversed being little more than three miles, the atmospheric principle will be adopted by the committee, and thus a quick and constant succession of rains will be secured. No other line than this could possibly meet the views, or suit the wants of the people of Belfast; it will no doubt, therefore, become a great favourite there, and the shares will be eagerly sought after by local applicants. The Newry and Warrenpoint Railway, which at present commands so high a premium in the market, cannot boast a passenger traffic superior to that between Belfast and Hollywood; and we can say with confidence, that no district, of a similar extent, in Ireland promises to yield so ample a return for the capital invested.

GREAT COUNTY DOWN RAILWAY.—We have already, on many occasions, expressed the high sense we entertained of the paramount advantages of this line. We do not intend at present dilating at any length on its merits, as we presume, they are sufficiently well known to the public. We will content ourselves with simply enumerating the following important points in its favour: it is the only line which proposes to extend to the entire county of Down the inestimable benefits of a thorough railway inter-communication, by opening up and developing its resources, from Belfast on the northern, to Warrenpoint on the southern, extremity of that county; it is the only line which has received the sanction of the landed proprietors, in the various localities through which it will pass, and particularly in that very remunerative portion of the Great County Down scheme, which is embraced between the towns of Newry and Warrenpoint; it is the only line which has received the warm support of the lord of the soil, Roger Hall, Esq., Narrowwater, who is determined to give decisive opposition to every line which will not be an integral part of the Great County undertaking; lastly, it is the only line which proposes to carry out a branch to the mail packet station of Donaghadee, and for which the capital is now subscribed. On the strong grounds, therefore, of public utility, and the vast local advantages which its adoption would confer, the Great County Down Railway presents irresistible claims to the preference and support of the government.

CAMBRIAN AND GLAND JUNCTION RAILWAY.—The importance, indeed, necessity, of uniting South Wales with Birmingham, the Midland Counties, Liverpool, Manchester, and the north of England, is acknowledged by all, who have paid attention to railway communication, and this is a plan proposed for the purpose, after mature deliberation, which the provisional committee confidently put before the public as the most direct, as promising a greater and more profitable amount of local traffic in minerals, general merchandise, and passengers, and being of easier and less costly construction than other proposed lines. Commencing at Hereford, the line will pass the vale of Severn by Bewdley, Bridgnorth, Broseley, Iron-

Signed "SAMUEL CLEGG :" dated Paris, April 12, 1838.

To H. Pinkus, Esq.—"I have made inquiries respecting your patents here, and find you have not any time to lose. I must be informed of all particulars, &c.; to get this done properly and in time appears to me to be of considerable importance. I think this is the very country and time for such a scheme. When you see the Samudas; tell them that the business is progressing. Your patents are of that importance, that nothing must be left to conjecture."

Extracts of letters from Messrs. Clegg and Samuda to Mr. Pinkus.

Signed "SAMUDA BROTHERS :" dated May 12, 1837.

To H. Pinkus, Esq.—"In answer to your request, we state the value of the machinery we have constructed for the pneumatic railway, viz., a

bridge, Colebrook Dale, and by Wellington and Market Drayton to Crewe or Buncorn, where the present existing lines continue on to Liverpool, Manchester, and the north. The construction of this line being nearly in a straight line, advantageously situated for the carriage of coals to the agricultural districts, and supplying to the barren neighbourhoods of the iron works, the riches of the agricultural wealth along its course, together with its through traffic from the north and midland counties, this railway is one of a most promising character to the capitalist. The amount required is 3,000,000*l.* in 150,000 shares of 20*l.* each.

READING, GUILDFORD, AND REIGATE RAILWAY.—This is a project for uniting the Great Western, South-Western, the Portsmouth Direct, the South-Eastern, and Brighton Railways, without going through the metropolis; to effect this a line of about forty-five miles is proposed to be constructed, commencing at Reading, passing up the valley of the Blackwater River, by Frimley and Guildford, thence to Shalford and Dorking, and terminating at the Reigate Station of the Brighton and Dover Railways. By this means a direct communication will be effected between the towns of Wokingham, Farnham, Alton, and Godalming, securing a through traffic to Dover, Brighton, and the other ports on the southern and south-eastern coasts, avoiding the circuit, stoppage, and expense of passing through the metropolis. This railway, if carried into effect, will, in connection with the proposed line from Rugby to Oxford, form a complete connection between the south, the west, and the north of England, bringing the ports of Liverpool and Chester, and the great manufacturing towns of Lancashire, Staffordshire, &c., in the shortest and most direct line of transit with the southern ports, and, consequently, with the continent of Europe. The capital proposed is 800,000*l.* in 40,000 shares of 20*l.* each.

DARTMOUTH, TORBAY, AND EXETER RAILWAY.—This company is formed for the construction of a line of railway thirty-five miles in length, commencing at Dartmouth and Brixham, and proceeding to Paignton and Torquay, from which place it will follow the course of the Teign by Newton Abbot, Chudleigh, and Moretonhampstead, to Exeter. Dartmouth and Brixham are noted for their facility of access for vessels at all tides, forming a perfect refuge for homeward-bound vessels, many of which are laden with perishable cargoes, which, in the event of a railway being completed to those places, would enable them immediately to unload and forward their produce to its destination, with a very great saving of time and money. Paignton, "The Garden of Devon," Torbay, and other watering-places on this delightful coast, will add to the streams of traffic on this line, while the rich agricultural districts by which the line is enveloped in its whole course, from which large quantities of cheese, butter, cattle, sheep, pigs, and other rural produce, will be transported, will add largely to the returns. The capital is to be 600,000*l.* in 30,000 shares of 20*l.* each.

GREAT MANCHESTER, RUGBY, AND SOUTHAMPTON RAILWAY.—This is one among several plans for uniting Southampton with the northern counties, without the delays and inconvenience of passing through the metropolis. This line is proposed to pass from Manchester through the important towns of Stockport, Macclesfield, Leek, Cheadle, Uttoxeter, Tittbury, Burton, Market Bosworth, and Hinckley, to Rugby; the company would then use the Rugby and Oxford Railway to Didcot, from which place it is intended to construct a new line to Southampton by Newbury, Andover, and Stockbridge. The present distance from Manchester to Rugby by railway is 116 miles, by the proposed line only ninety-two—thereby causing a saving of twenty-four miles; while by this means the most direct route is obtained between Manchester and the north and midland counties; it also secures the shortest course to the metropolis from Rugby by the London and Birmingham line, and places Sheffield, Leeds, York, &c., in a far superior position for communication with all parts of the kingdom than by the present system. The capital proposed to be raised is 3,000,000*l.* in 150,000 shares of 20*l.* each.

CONVERSION OF CANALS INTO RAILWAYS.—As the vast extension of railways in all parts of the kingdom must soon supersede canals as channels of goods' traffic, it is wise in the proprietors, when the possibility exists, to take immediate steps for their conversion into railways. The Kennet and Avon Canal Company have passed resolutions at a meeting held at Reading on the 26th ult., that application be made to Parliament in the next session to enable them to construct a railway on their line of canal from Newbury and Hungerford to Bath, and to increase their capital for this purpose by 800,000*l.* This capital is to be raised in 15*l.* shares, and every proprietor in the canal to be offered two railway shares for every canal share held by him, and there is little doubt that a very large increase of goods' traffic would ensue, and, with the passenger traffic on the line, pay a fair per centage on the whole of the investment.

SHROPSHIRE MINERAL RAILWAY COMPANY.—This company has been formed for the purpose of constructing a line of railway, to secure facility of transit for the produce of Shropshire, Worcester, and Gloucester. It is to commence near Norton-bridge (a station of the Grand Junction Railway) in Staffordshire, and from thence proceed by Eccleshall, Norbury, Forton, Newport, Donnington Wood, Oaken Gates, Prior's Lee, Stuchley, Dawley, Madeley, and Ironbridge, to Colebrook Dale, and crossing the projected Worcester and Crewe line, will continue along the slope of Wenlock Edge by Rushbury, Eaton-under-Haywood, to Wistanstow, where it will form a junction with the Shrewsbury, Hereford, and North Wales Railway. Traversing a rich mineral district, a secure and extensive traffic will be realised by the carriage of coal from the Shropshire and Colebrook Dale coal-fields, for the supply of Radnorshire, Herefordshire, and those places where coal does not exist, and as the price per ton will be, by this railway, reduced one-half, it is impossible to form an idea as to the extent to which this trade may be carried. At present the Shropshire iron masters incur a very large expense for the carriage of limestone, which, by the proposed railway, could be delivered at the works at one-third the expense. The line will be forty-six miles in length, and by its union with the Grand Junction, and the Hereford and Shrewsbury Railways, it will open a direct communication with Liverpool, Manchester, Sheffield, York, and all the north of England, as also with Swansea and South Wales, and a very large passenger traffic may thus be depended on. The capital is to be 700,000*l.* in 35,000 shares of 20*l.* each.

THE GREAT EUROPEAN RAILWAYS COMPANY.—Among the numerous, indeed, almost unlimited number of projects for new lines of railway which are now before the public, and other proposals for the judicious and profitable investment of capital, the above company comes forward with a most comprehensive scheme for undertaking the completion and working of all the proposed continental lines, as also a full and elaborate establishment of railways in our colonial possessions. It is proposed that whenever a grant for a railway has been secured by the successful negotiation of this company, such grant shall be constituted a separate and distinct company; the holders of shares in the original company to be entitled to a *pro rata* proportion of the shares in every new company formed by the obtaining of further concessions. A body of directors is to be chosen, not only well-known for their individual wealth and standing in society, but as men of sound practically scientific views. A portion of such directors, accompanied by a well appointed and efficient engineering staff, will visit the various localities where railways are required, report on the nature of the soil, population, the requirement of means of traffic, and every circumstance connected with the full development of the subject. Daily as proposals for the investment of capital are being made in railways in the United Kingdom, they are not sufficient to meet the enormous hoard of wealth which still remains to be poured into the lap of speculation; and a company such as this, formed from among the most wealthy and extensively connected of our *merchant princes*, our fundholders, and large land proprietors, will have resources at hand which will enable them to undertake the most gigantic projects in the shape of railway communication, and secure to the shareholders a large return for the capital invested. At present only a preliminary announcement has appeared; but, we understand, a prospectus will shortly be issued, with a powerful list of directors, a complete detail of the bankers, solicitors, engineers, &c., which will be required to carry out so extensive a scheme, when we shall devote some considerable attention and space in our columns for the full consideration of this highly important subject.

LEEDS, HUDDERSFIELD, SHEFFIELD, AND SOUTH STAFFORDSHIRE RAILWAY COMPANY.—This company is formed for the purpose of constructing a line of railway sixty-five miles in length, connecting the West Riding of Yorkshire with the iron districts of South Staffordshire, and opening also a communication with North and South Wales and the west of England. It will unite the great iron districts of Dudley, Tipton, Walsall, Wolverhampton, Bilston, and Wednesbury, with the manufacturing localities of Sheffield, Huddersfield, &c., and, at the same time, bring the whole into immediate communication with Kidderminster, Worcester, Cheltenham,

Gloucester, Bristol, and the whole of the south and west of England. The lead mines and slate quarries in the neighbourhood of this proposed line, and the barytes and paint works at Ashbourne and Cromford, will certainly bring a vast amount of traffic to the line, while the splendid scenery of Derbyshire, already visited by so many thousands, will, on the opening of such a means of transit, induce a large increase of visitors. The limestone of North Staffordshire, the timber of Needwood Forest, and of the Banks, Baggots, and Kingston Woods, will, by this means of communication, find an easy, expeditious, and new means of access to other markets, while the agricultural districts in the neighbourhood of the line, can, by this means, be supplied with lime for manure, and limestone and ironstone, so much more abundant in the north, than in the south, of Staffordshire, will, it might be expected, almost of itself prove a sufficient return for the capital expended, in the charges consequent upon its removal from one place to another, and these, in addition to the very great passenger traffic, which must result from the populous district through which the line will pass, will doubtless secure to the shareholders a handsome per centage on the capital, which is 1,700,000*l.* in 85,000 shares of 20*l.* each.

APPLICATION OF THE ARCHIMEDEAN SCREW TO RAILWAYS.—In our columns of the 16th ult., we observed on the ingenious invention of Coleman's screw propeller attached to locomotive engines, for surmounting with greater facility steep gradients, a model of which is now exhibiting at the Royal Polytechnic Institution, and to which we at the time directed attention. We find, by an advertisement which appears in our present Number, that the invention and patent right is claimed by Mr. Templeton, who, we are given to understand, obtained letters patent for this and some other improvements in railway propulsion, some time previous to those of Mr. Coleman. If we are rightly informed—for we have felt some interest in the matter, and have made personal inquiries—it would appear, legal evidence exists that the principle, or application, as contemplated by Mr. Templeton's patent, had been established antecedent to that of Mr. Coleman's. It matters not to the public by whom so important and satisfactory a mode of avoiding tunnelling, fixed engines, and other appliances, is originated; sufficient is it that such an improvement on the present principle exists, and we shall hail with pleasure its success, whether emanating from the mother country or the new world.

YORK AND LANCASTER RAILWAY.—This line, which is seventy-two miles in length, forms a direct communication between the termini, while, as compared with the present mail or coach road, ten miles, or one-eighth of the distance, is saved, and the difference in time effects a saving of nearly four-fifths, that occupied at present being twelve hours, while, by the "rail," two hours and a half is the estimate. The capital of the company is, we are given to understand, beyond the amount actually required; it being 1,600,000*l.* divided into 32,000 shares; the engineer's report being that the gradients are of a favourable nature, and, moreover, the line, passing through the vale, is on level ground. A line has been projected from York to Knaresborough, a distance of some eighteen or twenty miles, if we mistake not, but we assume such must form a collateral part of the trunk line now projected, as there can be no object in having two lines, while the one under notice is a continuation on to Lancaster, a distance, as already observed, of seventy-two miles. The population of these two towns alone is, we find, nearly three millions and a quarter, while the mineral products of lead and iron, not to advert to slate, limestone, building-stone, and other materials, insure an extensive traffic. At Lancaster the line forms a junction with those to Preston and Carlisle, while a communication between Lancaster and Hull, by means of the Leeds, Hull, and Selby line, holds out increased advantages—not to advert to its connection with Morecombe Bay, which will effectually enclose, or "recover," some 20,000 acres of land, which will belong to the company. Considerable interest is, we are led to understand, attached to the formation of this line, by those in its locality, inasmuch that there is great want of communication in the district which it traverses. We are promised some detailed information, by way of statistics, which we shall gladly lay before our readers.

WARRICK AND WORCESTER RAILWAY.—This company is formed, under a most influential provisional committee, for the formation of a line of railway commencing at Warwick, and completing the great chain of railways from Boston, Peterborough, and Northampton, by a termination at the great focus of western railways, the city of Worcester. This line cannot be considered a competing railway, but will, undoubtedly, greatly aid those already established in connection with the two cities. By means of the Oxford, Worcester, and Wolverhampton line, which is to be extended to Porthdynllaen, this railway will give to all the towns and places connected with its termini, direct access to all the railways running westward, and, consequently, with all the ports of Wales and Ireland, while, by means of the London and Birmingham extension, it will open up a communication with the whole of the north and east of England. The line will commence at the London and Birmingham station at Warwick, and proceed by Alescester to Worcester, uniting with the Oxford, Worcester, and Wolverhampton line, and a branch will be constructed to Droitwich, which will secure a considerable traffic connected with the salt trade. In the surveys all un favourable gradients, and ornamental property have been avoided, and the construction of the line can be effected on such advantageous terms, as to secure, from the extensive goods and passenger traffic which will doubtless ensue, a very handsome return for the investment: the capital is 700,000*l.* in 35,000 shares of 20*l.* each.

LONDON, BRISTOL, AND SOUTH WALES DIRECT RAILWAY.—This company is formed for the purpose of accomplishing the most direct railway communication between the metropolis and South Wales, whose natural harbours, vast mineral productions, and celebrated manufactures, render that district one of the most important in the kingdom, and from whence the most easy and direct traffic with London, is, in a national point of view, of the utmost importance. It is proposed to employ the Great Western line as far as Hungerford, at which place the new line will commence, and proceed, scarcely out of a straight line, by Marlborough, Calne, and Chippenham, where it will again join the Great Western Railway. From Chippenham the line will proceed by Chipping Sodbury to the Bristol and Gloucester Railway at Westerleigh, eight miles from Bristol; it will then be continued to the River Severn, at the Aust passage, which it will cross by the fixed bridge of the Bristol and Liverpool Junction Railway, it will then proceed for half a mile on the Monmouthshire side, cross the Wye, and terminate at the South Wales Railway at Hunger Pill. By these means a saving will be effected over existing routes, between London and Bath seven miles, London and Bristol eight miles, and London and the whole of South Wales from sixteen to twenty-three miles, according with which proposed railway the comparison is made. By this line a new and important market will be open for coals from South Wales, which can be delivered in London by the direct railway at 15*l.* per ton; Newport will be brought within 129 miles of London, and the large passenger traffic which, as well as goods, will then traverse this railway, holds out promises of a good return for the capital invested, which is proposed to be 1,200,000*l.* in 60,000 shares of 20*l.* each.

BRIDPORT AND SOUTH COAST JUNCTION RAILWAY.—This is a project for a coast line railway, connecting the whole of the ports and towns on the south coast of England, and to complete the link in the great chain from Dover to Plymouth, and the Land's End. During the session of Parliament of 1844, bills for three southern railways passed the Legislature—the Brighton and Hastings, Brighton and Chichester, and South Devon; and in that of 1845, the Hastings and Ashford, the Chichester and Portsmouth, and the Southampton and Dorchester lines, obtained the necessary Parliamentary sanction for their construction. The proposed line under consideration, though strictly a coast line, will be tolerably direct, and will convey the entire through traffic from Cornwall and Devon to the packet stations of Weymouth, Southampton, Portsmouth, Brighton, Folkestone, and Dover. The main line from Bridport to Exeter will be thirty-six miles in length, and three intended branches to Axminster, Honiton, and Exmouth, will make the entire undertaking fifty-eight miles. The population on this route amounts to 106,537, or equal to 1802 persons per mile, and the nature of the country is of that easy character, that, from the most careful estimates, it is shown, that the entire undertaking will be completed for 15,000*l.* per mile—thus requiring a capital of 900,000*l.* which will be divided into 36,000 shares of 25*l.* each.

BRISTOL AND DOVER DIRECT JUNCTION RAILWAY COMPANY.—A preliminary announcement of a company under the above title has just appeared, formed for the purpose of constructing a railway to form a direct line of communication between the two important ports mentioned in its title. By newly projected routes, these will be connected by railway with Bath and Bristol, it is therefore proposed that the line shall commence at the former-named place, and proceed in a South-Eastern direction,

through or near the populous towns of Ludgershall, Andover, Whitchurch, Basingstoke, Odham, and Farnham, to Godalming; at this place it will form a junction with other lines, completing the communication to Reigate, on the London and Dover line, and should the projected railways by which this junction from Godalming is completed, from opposition or any other adverse circumstances, not be constructed, the company's line will be continued from that place to Dorking and Reigate. This project will place the mineral districts of Wales, the northern and midland traffic which pours in from the Birmingham lines to Bristol, the west of England cloth districts, the great productions of the north, as well as the agricultural and maritime wealth of the southern counties in immediate and direct connection with all the Kentish ports, and through them with France and all the European continent. The promoters of this line bring it forward as no competing scheme with railways either finished or projected; it stands on its own intrinsic merits as great link in the general national chain, and on the issuing the prospectus with the names of the provisional committee, we shall again notice it. In the meantime, the capital required is estimated at 800,000*l.* in 32,000 shares of 25*l.*

PROGRESS OF RAILWAYS IN FRANCE.

[FROM OUR CORRESPONDENT.]

Yesterday was a very memorable day in the history of French railways, for yesterday took place the adjudication of the gigantic Northern Railway, and its embranchments. Half-past two o'clock was the time fixed for the adjudication; but long before the clocks had barked out two, the Rue St. Dominique, St. Germain, and the adjacent streets were blocked up with elegant carriages and hack cabs. The court of the Ministry of Public Works was thronged with a motley and impatient crowd, jabbering, and pushing, and squeezing, cursing the burning sun, complaining of the delay, and guessing at the time for which the concession would be accorded. At length the doors of the *salle* were opened, and in pushed the crowd, helter-skelter, slap-dash, coats being damaged, hats smashed, ribs horribly squeezed, and corns cruelly crushed in the struggle. Silence! The Minister of Public Works, with a long train of functionaries and officials, forming the commission for adjudicating the line, entered, and took their place at a green table. The Minister looked as solemn as a minister should do, and with pale and anxious. Presently, in front of him, there was a struggle among the crowd, and Monsieur Rothschild pushed his way through, with his *toilette* somewhat in disorder, his face very hot, and his eye looking exceedingly angry—the vulgar crowd had not even had the politeness to make way for the man of millions! "The sitting is opened," said the Minister, clapping on the table a big letter sealed with a big seal; "I call upon the companies, who desire the concession of the Northern and Famporeia Railways, to deposit their submissions." Thereupon M. de Rothschild lugget out a big letter, sealed with a big seal, and handed it to the Minister; and Messrs. O'Neill and Co. presented another big letter, sealed with another big seal, containing their submission for the Famporeia embranchement. All was now anxious expectation, but the Minister declared that he must wait until half-past two o'clock before he opened the letters. Meanwhile he recommended the gentlemen to take a walk in the garden, but scarcely one of them budged, notwithstanding the excessive, and all but insupportable, heat. At length the hands of the clock travelled round to half-past two, and once again the attention of the closely-wedged crowd became fixed on the Minister of Public Works and his colleagues. The Minister then proceeded to read the law of the 15th July, 1845, on the Northern Railway (an abstract of it has appeared in the *Mining Journal*), and a certificate from the *Caisse des Dépôts et Consignations*, that M. Rothschild and Co. had deposited the 15,000,000*f.* required as a guarantee. That done, the Minister somewhat nervously opened the letter of Rothschild, and read it aloud, amidst almost breathless silence. Messrs. Rothschild proposed to reduce the forty-one years concession, allowed by the law, to THIRTY-EIGHT YEARS; and, therefore, the Minister declared that that period, being less than was marked in his own sealed letter, deposited on the table, Messrs. Rothschild, Hottinguer, Charles Laffitte and Co., were *concessionnaires* of the railway from Paris to the frontier of Belgium. This announcement was followed by a general murmur, and some applause, and immediately after a number of persons threw themselves into cabs, and scampered off to the Bourse, as fast as horses could carry them. Then came the turn of the embranchement from Famporeia to Hazebrouck. The Minister read the law applicable thereto fixing the concession for a period not exceeding seventy-five years; and he also read certificates from the *Caisse des Dépôts et Consignations* of the deposits of the sum required as guarantees by the companies of Rothschild and O'Neill. He then opened and read the letter of Rothschild, proposing to take the embranchement for the period of thirty-eight years—just half of what the law allowed. The letter of Messrs. O'Neill and Co. was next opened, and they offered to take the railway for 37 years, 316 days, or 49 days less than Rothschild. The Minister accordingly formally declared that Messrs. O'Neill, the Marquis de Flers, Louis Reant, Alphonse Laurent and Co., were the *concessionnaires* of the railway from Famporeia to Hazebrouck. This decision was quite unexpected by every one, and by none apparently more than M. Rothschild himself—indeed, the wonder expressed on his face, on hearing that he had been underbidded by his competitors, was so very great as to be almost ludicrous.

Thus, then, at last is the Great Northern Railway from Paris to the frontier of Belgium in the hands of a company. A royal ordinance, it is true, is still necessary to give effect to the adjudication, but it will be given as a matter of course. After many delays and many adjournments, the public will at length enjoy the advantage of having this important railroad opened for traffic. Rothschild, too, has at last got into his hands the railway which he has always coveted—not, indeed, on such advantageous terms as he hoped to have it a few years ago, but still on better terms than many expected he would get it, the general impression being, that the period would not exceed thirty-three or thirty-five years. Thirty-eight years, however, are not too long, for the company will have immense sums to pay to the Government, as well as a heavy outlay for stocking the line with locomotives and carriages. You have no doubt seen many a bustling crowd on the London Stock Exchange, but I question if even in London there have been many such assemblies as on the Bourse yesterday. Vulgar though the comparison may be, I can liken it to nothing else than herrings wedged in a barrel—you were there, but to get out, or to move from one spot to another, was literally and physically impossible. The crowd was tremendous, the heat suffocating: and yet all that crowd was assembled to buy or to sell promises of shares in the Northern Railway. The Northern Railway, and that alone, monopolised the immense business that was transacted yesterday. No estimate can be formed of the amount of that business, for the din and the tumult, and the bubble of thousands of voices were deafening and bewildering. But this I happen to know that Rothschild's promises went off at 36*l.* premium and upwards, and the promises of the other companies, now his associates, also increased in value. O'Neill's promises in the Famporeia and Hazebrouck line, obtained rather more than 21*l.* premium. That O'Neill's company would succeed in carrying off the Famporeia to Hazebrouck embranchement from Rothschild was not expected; but it is not improbable, after all, that the two concerns may unite, for the Northern Company can work the small subsidiary line to Hazebrouck cheaper than a separate company.

On Monday, the Tribunal of Commerce had a similar dispute to settle between the company Decan Lebeuf and some of its subscribers, to that settled a few days previously between Pepin-Lehalleur and his subscribers. As in the Pepin-Lehalleur case, the court decided that the persons who did not pay up the required deposits in due time, had no right to insist upon having shares delivered to them. Some of the newspapers attack this decision, but it is undeniably a just one. How can a man claim shares in a company when they are at a high premium, that he refused before they obtained a premium?

From the advertisements in the newspapers, it appears that in the company of Rothschild, the shares have been thus divided:—To Charles Laffitte, Blount, and Co., 78,000*f.*; to Rosam's Company, 41,000*f.*; to Pepin-Lehalleur's Company, 30,000*f.*; to Decan-Lebeuf and Co., 41,000*f.*; to Rothschild, Hottinguer, Baring, and others, 210,000*f.*—in all 400,000 shares, representing a capital of 150,000,000*f.*, or 375*f.* per share. Of this number more than half is held in England. The line from Creil to St. Quentin is an embranchement on the Northern Railway, and, no doubt, the company of Rothschild will endeavour to secure it, especially as it is proposed to extend it to the German frontier, whereby it will become a line of very great importance. Notice of the day of adjudication will probably soon appear in the *Moniteur*. Several companies are already formed to bid for it, and it is very likely that others may yet come into existence.

The success of the *fusion* of M. de Rothschild for the Northern Railway (whereby several rickety companies secured a share in a great prize) has caused a number of new companies to be formed for the Lyons, Avignon, Strasbourg, and other lines, that will be put up for adjudication before long. It is perfectly evident that the concocitors of many, if not of all, these companies have no hope of obtaining the lines for which they propose to offer, perhaps even they do not expect that the Minister of Public Works will admit them to the adjudication; but they calculate, by threat of opposition, to frighten greater and more important companies to make terms with them. Such a way of transacting business may be, and for ought I can say to the contrary, is, perfectly justifiable; but, as it may happen not to result in the anticipated success, it will be as well perhaps for your readers to bear it in mind, upon perusing the flaming advertisements which will shortly be presented to their notice.—Paris, Sept. 10.

THE CONTINENTAL IRON TRADE.

We have alluded, in former Numbers of the *Mining Journal*, to the exposition at Berlin, and the great progress that is making in mining operations in France, Belgium, and Germany; we now feel great pleasure in being enabled to give the following interesting article from the *Journal des Travaux Publics*, on the metallic industry of Austria, which, no doubt, will be read with interest:—Austria possesses all the necessary elements for the development of the industry in iron. Its territory abounds in mines, and the extensive veins of spathose iron which the provinces of the Alps possess, have made it the most important centre in the manufacture of natural steel. It is not only well supplied with ores, but also with fuel. The forests cover more than a quarter of the empire, and in many parts where wood is not in much demand it is of very little value. It contains, particularly in Bohemia, very rich coal mines, which are now being worked to great advantage, and there is no doubt that the metalliferous productions of Austria will, in a few years hence, be most flourishing, as the demand for iron is daily increasing. The production of iron metal in Austria in 1843 amounted to 2,351,000 quintals of rough iron and 369,000 quintals of cast-iron. Notwithstanding the great progress that has been made in Austria it only produces one-twelfth part to what England does, the third of that of France, the half of that of Prussia, and the other German states. The total value, arising from this branch of industry in Austria in the manufacture of iron, is estimated at thirty-two millions of florins, out of this amount she exports, about four millions, which is accounted for by the excellent quality of the iron and steel produced in the provinces of the Alps. The working of iron is general throughout all the provinces of Austria, which may be divided thus:—

	Rough metal.	Moulded metal.
Upper Austria	39,276	cwts. 1,706
Lower Austria	17,551	—
Styria	673,149	54,078
Corinthia and Carniola	494,256	12,239
Tyrol	50,259	10,647
Lombardy	90,733	23,350
Bohemia	269,169	135,981
Moravia and Silesia	224,563	76,011
Galicia	28,189	7,506
Hungary	373,363	38,00
Transylvania	62,340	422
Military districts	18,434	9,122
Total	2,341,282	369,542

From the above, it will be seen that the great seat of the production of iron is in the southern provinces, near the Alps. It is there where are found the extensive beds of spathose iron, the richest known in the world. The northern part presents numerous works, particularly in the Tyrol, Salzburg, but, above all, in Styria and Upper Austria; the *gîtes* of Eisenberg, Erzberg, Admont, and Vordenberg, the latter are situated at twenty-five leagues from Vienna, and are of great renown. The southern wing has also some very important ones, from Lake Superior as far as Carinthia, among which must be named those of Huttberg, in Carinthia, and those of Bergame in Lombardy. All these workings of spathose iron are opened in the middle of various rocks, that formerly belonged to the Alpine mountains. Of all the mining provinces that are worked near the Alps, Styria is that which produces to the greatest extent, as its richness is principally in the mountain of Erzberg, which is chiefly formed of spathose iron. This mountain is worked by two companies, the one composed of fourteen proprietors, and known under the name of the Union of Vordenberg, which has one-half; they work together, but each proprietor manufactures his articles separately. The other, the company of Innerberg, which is situated near Eisenberg, has five high furnaces, and seventy-five forges in different parts of Styria, Upper and Lower Austria. This society produces annually 120,000 cwts. of rough metal, and sells the greater part to the forge masters; it manufactures itself 30,000 metrical cwts. of iron bars, and 11,000 metrical cwts. of excellent cast-steel. The mountain of Erzberg is worked open to the air, it is more than 2000 feet high, and is considered quite inexhaustible; the ore is conveyed by railroad to the different furnaces. Wood is very abundant in this country, and is conveyed from the mountains by the two rivers, the Enns and the Salza. The carbonisation of it is very great, which is done at the two charcoal burning furnaces of Hiflau and Raifing. That of Hiflau carbonises annually 5000 cubic fathoms of wood, and that of Raifing 2500. The method of carbonisation, or charcoalising, is the Italian. The stacks of wood that they raise are from sixty to one hundred cubic fathoms, their diameter about fifty feet, they burn for four weeks when the wood is dry, and five when it is damp. This system was introduced into Styria in 1811 and has very much extended since; it is adopted in Hungary and the Hartz. In Saxony they make use of nearly the same process, but they make stacks much higher and introduce three times the quantity of wood, which succeeds well. The greater part of the high furnaces in Styria consist in high closed breast furnaces, known under the name of *Blanofen* or *Flussofen*, the origin of which can be traced to the fifth century, at which period the arts and sciences commenced to develop themselves in Europe. The high furnace is, however, generally adopted in the present day, and it is only in Styria, Carinthia, and Thuringia that the others are at all used. The affiance of cast metal is carried on at a great number of small forges in the vicinity of Vordenberg and Eisenberg, where one cannot go a quarter of a mile without hearing the hammer beating on iron or steel, these generally belong to petty proprietors. There are, however, in Styria some very large forges, in which they only use wood to affine the metal and work the iron. It is at the forge of Neuberg, situated in a most picturesque spot on the river Murtz, well supplied with water, where this system was first introduced. The wood generally used is of a resinous nature, known under the name of *pinus picea*. They commence by drying it in open air, by leaving apertures, so that the wind can circulate freely, and afterwards placed into drying ovens, from whence it comes out quite red. The forges used in general at Neuberg is the English forge, and the ovens for puddling by wood are just the same dimensions as those employed by the English puddling with coal. The operation of puddling of cast metal, which by the Champenois system is done by coal, is here done by wood or charcoal. A great number of the manufacturers of Styria have already imitated the process employed at that of Neuberg, also in Carinthia and Hungary. This method of fabrication with wood is only applicable where it is of a resinous nature, cheap, and not far distant from the forge. Styria has every means of fabricating it, as the ore is cheap and is of excellent quality, and the wood very reasonable. Carinthia and Carniola, are the provinces of Austria, after Styria, which produce the greatest quantity of iron and steel, and by the same process. The greater part of the furnaces obtain their ores from Huttberg; it is a spathose iron, often mixed with sulphated barytes, which is kept separately for the fabrication of ceruse, or white lead, which is very extensive in Carinthia.

The principal manufacturers of Styria sent samples of their productions to the exposition at Vienna. The establishment of Eisenberg (Styria) exhibited some very fine specimens of iron, and every description of steel, both hard and soft, according to the use made of it. The forges placed in the environs of the mines of Vordenberg were not backward, and also sent some fine specimens, particularly those of Prince Schwarzenberg at Muran, Sessler, Dickmann, &c., which attracted general attention. The establishment of Neuberg sent some rails, small iron, hoops, and cast metal. The steels of Baron de Zois in Carinthia were of a very superior quality, and, although they have existed but three centuries, they are far renowned; to give an idea of their importance, it is only necessary to say, that out of 34,000 quintals, or cwts., of steel exported from Trieste in 1844, there were 9800, yielding more than 29 per cent. Among the samples exposed, we must name those from the furnace of Count Egger, who works the excellent ores of Huttberg, some forges of Upper Austria, and from the founders of Mariazell and Saint Etienne (Styria), which sent enormous pieces of cast iron. The great employ of steel in the Austrian provinces in the Central Alps is principally for the making of scythes—this branch of industry employs more than 10,000 persons. It is estimated that Austria alone produces annually 5,000,000 scythes and scythes, representing at least 2,200,000 florins, of which they export about 1,500,000 florins to foreign parts. The chief centre of this branch of industry is in Upper Austria, particularly at Kirkendorf and Micheldorf, in the vicinity of Truan, where there are upwards of thirty foundries, worked by hydraulic power, only making scythes; these are chiefly exported, and are marked with the letters K. M. There is one of these, that of M. Gaspan Zeitlinger, which annually sends out to the trade 180,000 scythes. This manufacturer exhibited at Vienna more than twenty-one different models of scythes, as used in Austria, Germany, Russia, Switzerland, Italy, France, &c. A great number of scythes are made in Styria, Carinthia, Wolfsberg, Le-
vianthal, and Neumarkt. In the Tyrol they manufacture scythes, the cut-

ting blade of which is only in steel, whilst in Styria and Carinthia they are all in steel; samples of which were at the exposition. The iron foundries of Lombardy are concentrated in the district comprised between the Lake of Como and the Lake de Garda. They are spread in the valleys or chains of mountains which extend towards the south of the Alps, running from north to south. The ore generally worked is the same as in the former countries, being manganiferous and spathose iron, which is found in large veins in the ancient earths. There are sixteen to eighteen high furnaces, all with closed breasts, which produce the greater part of the white drawn metal; the affiance is on the Bergamasque system, which consists in melting it slowly under the wind of the tube, and throwing into the liquid bath filings of iron, which are very plentiful, and afterwards mixing the cast metal with fragments of coal and scoria, so as to affine it by the usual method. This method, however, which consumes a large quantity of fuel, has the advantage of not losing much, and yields about 12 to 15 per cent. The foundries of Lombardy are in general excellent condition, being on the borders of immense forests that cover the mountains, affording thereby every facility as regards water, and excellent means of conveyance. The cast metal, however, is rather dear, being at the rate of 15 fr. the cwt.; but it is certainly of a superior quality. The good quality of the Lombardy iron renders it suitable for nearly every description of works. Lecco is renowned for its iron wires; Sovero for its iron cart and wagon wheel loops, and Brescia for its manufacture of fire-arms; a great number of small forges work iron for agricultural purposes, locks, shodding of horses, &c. It may be noticed, from the above table that we have given of the iron industry in the south of Austria, that it is greatly divided—the forges are numerous and small; but in the north, on the contrary, less favoured than the south in every respect, as regards the abundance and quality of the mineral, the industry is more concentrated, and on a larger scale. Here everything belongs to the proprietors of the extensive forests, who possess, therefore, every facility of procuring fuel for their high furnaces, forges, drawing cylinders, &c., which has caused them to increase so rapidly. Bohemia is one of the northern provinces, where this industry has greatly extended. The production of cast metal has doubled within the last ten years, and they employ generally turf mixed with charcoal. The foundries of Ransko, in the south-eastern part of Bohemia, belonging to Prince Dietrichstein were the first to use turf. The ore is generally of an oxide argillaceous nature, very rich, yielding 20 to 21 per cent. At the exposition of Vienna we noticed some excellent productions of the industry of Bohemia and Moravia, particularly that from the manufactory of Blansko, which occupies 1000 workmen, and that of Messrs. Klein, Brothers, where there are 700. Bohemia and Moravia alone produce two-thirds of the cast metal of the whole country. In Hungary the iron trade has not yet made a rapid progress, the chief foundries are at Rhonitz, near Neusohol. One of the things that most struck the attention at the exposition of Vienna, was the immense productions from the metallurgical establishments belonging to the Austrian Government, which possesses some most extensive ones, which the following return will show:—Upper Austria 26,668 cwt. of rough cast-iron; Styria, 278,600; Tyrol, 45,335; Bohemia, 29,269; Hungary, 149,677; Transylvania, 40,677—total, 570,226 cwts. Therefore the Government alone produces more than one-fifth of the whole country. In Styria it produces more than two-thirds that the whole province does, in the Tyrol nearly the whole, in Hungary the half, and in Transylvania the two-thirds, making a profit of about 50 per cent. on the iron produced at its forges, as well as in Styria, Hungary, and the Banat. It has no other opportunity of taking advantage of the numerous forests it possesses; it occupies a great number of workmen in those parts that present the least resources; it is which undertakes all the expensive experiments of foreign invention, and was the first to establish at Neuberg and Styria the first drawing cylinders and the puddling with wood. It, therefore, keeps the equilibrium of prices between private speculation in Austria, which is necessary, as the manufacture of cast metal is, in a measure, monopolised; for, although there are 200 high furnaces in Austria, they are principally in the hands of a few. It will be seen, that a very rapid progress is making in her iron factories, and the demands now making for railways will contribute greatly to increase, but it will be some years before she will be enabled to compete with France or England.

NEW PROCESS OF REDUCING SILVER ORES IN MEXICO.—We understand that a patent has been obtained in Mexico on behalf of the Real del Monte and Bolanos Mining Companies, for a new process of separating silver from the ore, without the aid of quicksilver, and, from all we can learn here, there is every prospect of the old Mexican plan of amalgamation being eventually superseded. We can but express our earnest hope that this expectation may be fulfilled, and that the Mexican Government, and others interested in the mines, will afford every possible encouragement to a plan which is likely to render them so important a service, as that of setting aside the use of quicksilver in the reduction of the ores of silver. We are assured, that not only are the mines now working in Mexico, in many instances, rendered unprofitable, in consequence of the existing monopoly of quicksilver, but that there are hundreds of mines, which may be worked advantageously, if the silver can be extracted from the ore by a cheaper method than the one now in use.

In the present day, when the all-engrossing mania of railway speculation appears to have almost absorbed universal attention, we are glad to perceive mining is not wholly forgotten as a field of new enterprise, and that legitimate enterprises are still undertaken by some of the new companies. Our attention has been called to the subject, by reading in our last number a list of assays of ore from the mines of the Andalusian Association, and which appear to hold out most gratifying prospects to the shareholders; for we perceive, from the accompanying extracts of a report from the superintendent, Mr. F. Burr, that they are mostly surface samples, or nearly so, and as these, even now, yield a high per centage for copper ores, reaching as high as 31 per cent, and knowing Mr. Burr (to whom our readers are indebted for many valuable papers) to be a gentleman of considerable judgment and skill, we infer that the ores will at a greater depth be found very valuable, and, we hope, reward the exertions of the adventurers. We know nothing of the company, but, judging from the respectability of the names composing the direction, and the character of the superintendent in Spain, we augur well of the undertaking, and heartily wish them success, merely because we see them prosecuting a legitimate enterprise.

MINING IN CARDIGANSHIRE.—We are glad to learn, on unquestionable authority, that Col. Powell has, in the most liberal manner, met the wishes of the adventurers embarked in working mineral ground on his estate, by reducing the dues from one-seventh to one-tenth "dish." Cwmystwyth is, however, we understand, excepted. We are pleased to have the opportunity of thus recording an act which does credit to the lord, and, we feel assured, that he will find his revenue increased by the encouragement thus given to the outlay of capital in mining research. We do not take any credit to ourselves for the change in this and another instance, where an equal degree of liberality has been manifested, in a new grant in Merionethshire at one-twelfth dues, although we have reason to know that the remarks which have appeared in our columns have attracted attention.

MINING IN NORTH WALES.—While our attention has been more especially directed of late to the mines of the Cardiganshire district, we have not lost sight of those promising and important adventurers, "further north," which we hope to visit on an early day. In the meantime, we gladly avail ourselves of such information, as we may acquire, on which, we feel assured, reliance may be placed, and hence it affords us pleasure to note the successful operations at the "Dylife Mines," in the neighbourhood of Machynlleth. These mines are held by Messrs. Williams and Pugh, and yield about seventy tons of lead ore per month, and ten to twelve tons of copper ore, with every promise of increased returns as the works are extended. If our information, however, be correct, we should advise the operations being carried on with increased vigour and energy, as the mines would fully warrant a more extended series of workings.

CRAG DDHU SLATE QUARRY.—The slate formation in North Wales produces an article for commercial purposes, equal, perhaps, to any in the world, not even excepting the island of Valentia. Bangor has always been most famous for its slate productions, and upon the same strata at Festiniog is the quarry proposed to be worked by the present company. The slate is stated to be of the very finest quality, capable of being cut in blocks for every artistic purpose to which slate is applied, and can also be split into unusually thin tablets, for house roofing, &c., &c., the *headings* have already been removed and the quarry partially worked, a level has been driven 315 feet into the body of the rock, and the works promise a most ample remunerative return for the capital, which is to be 150,000*l.*, in 6000 shares of 20*l.* each.

THE IRON TRADE.

[We have been favoured with the following report on the present state of the iron trade by Messrs. Huges, Cowie, and Co., of Liverpool.]

We have little change to note this month in metals of all kinds, with the exception of iron. The price of *PIG IRON* is a shade lower, a few sales having been effected at 18*l.* to 18*l.* *SPELTER* continues steady. Our figure is rather lower for *TIN PLATES*, *I C* best charcoal having been sold as low as 31*s.*, but they have since rallied, and are now firm at 32*s.* to 33*s.* As our last report led you to expect, the prices of all description of *IRON* have risen considerably. There has been no general meeting of the Staffordshire ironmasters quoting a rise in price, though the leading makers have issued circulars advising an advance of 20*s.* per ton on bar, and 10*s.* per ton on pig-iron. As a matter of policy also, the Scotch makers of pig-iron have not concurred *as a body* to raise their price beyond 62*s.*, but it is quite understood that they are not sellers at 80*s.*, and only in small quantities at 90*s.* per ton. Speculators are parting with few lots at the former figure. The present state of the iron market, however, seems to call for more detailed observation, and we venture to lay the following remarks before you:—

Since we last had the pleasure to address you, Parliament has terminated its laborious sittings, in the course of which it has passed 104 lines of railway, the total length of which is about 2750 miles. That this enormous amount of mileage, demanding a corresponding quantity of iron, will have great effects on this important staple cannot for a moment be doubted; the question is to what extent is it likely to increase the price, for that the supply can for some years to come keep pace with this unprecedented demand is what no one at all acquainted with the iron trade can, for a moment, suppose. Were the present a period of great depression in all branches of commerce, we think it possible that the quantity of iron might be much more rapidly augmented, but the contrary to this is the fact, and while in the former case *labour* would be so abundant as to cause a vast *accession* of it to the mining districts, and at the same time cheapen its remuneration, in the present instance the demand for it in the making of railways in every direction, independent of the general prosperity of the country, must render it both *scarcer and dearer* to the miner and ironmaster. Even were this not the case, it must be remembered that the iron trade is just emerging from a period of great depression; the make for some time past has exceeded the wants of the country, and, consequently, the ironmasters have had little inducement to erect new works and increase their supply, so that though for the last few months their attention has been drawn to the coming demand, they have made but little progress towards its supply, *time, labour, and capital* being all necessary to enable them to enter upon new fields of minerals so as to produce any very great addition to the present yearly make of the country. We have thought it necessary just to allude to this subject, as a very erroneous impression is current in some quarters as to the capability of the ironmasters to extend their works to any amount.

We will not hazard an opinion as to the price to which iron may go, either in the present or succeeding years, beyond saying that (setting aside the fluctuations which random speculation may occasion) we look for a gradual and permanent rise in the prices of all descriptions. With respect to *PIE-IRON*, we have now before us a circular issued by one of the largest makers in Scotland, dated the 5th of October, 1836, in which their quoted price is 6*l.* 10*s.* for No. 1 pig-iron, delivered in Liverpool or Runcorn. This period was one of great excitement in the formation of railways; the years 1835-6-7 having produced schemes sanctioned by the Legislature of the total length of 1600 miles, averaging 533 miles per year. At that period there was a larger extent of line passed than at any former or subsequent one till the present—the six years succeeding 1837 producing less than 500 miles. Setting aside the year 1835 as not evidencing an immediate want of iron for lines passed in that year, and taking the years 1836-7-8, when the demand would be felt, we find that the *average* price of pig-iron, in Liverpool or Runcorn, was 5*l.* 15*s.* per ton. The next two years, 1839 and 1840, it was 4*l.* 12*s.* 6*d.* per ton, and (gradually decreasing as there were no lines of railway to provide for) in 1841-2-3 the average price was 3*l.* 11*s.* 8*d.* per ton. In the sessions of 1844 and 1845, lines of railway to the extent of 3550 miles have received the Royal assent—or more, by about 600 miles, *in two years, than the aggregate of railways in existence in the kingdom*. Of those passed this year there are extensions and short lines, under twenty miles, representing 500 miles of road, which will be immediately proceeded with. Some of the larger Scottish lines (with the usual prudence of our northern neighbours) have a portion of their rails already contracted for; and the lines passed in the session of 1844, amounting to about 800 miles, are only in part supplied with the iron necessary to their completion. The policy of the Government, with regard to Irish affairs, will hasten the completion of those lines also, the contracts for some of them being already before the public. We calculate that to supply the lines already passed, considerably more than 2,000,000 of tons of unmanufactured iron will be required. It would be premature to conjecture what iron will be needed for lines in progress through Parliament, and new ones to be brought forward next session, though the prudent iron merchant will not omit this item in calculating the future prospects of the trade.

The position of the country, with regard to *RAILWAY BARS*, may be more fully estimated when we state, on the authority of one of the largest and best informed ironmasters, that the average make of the present year is about 350,000 tons, of which, judging from last year's exports, about 120,000 tons will be exported to foreign countries, while the mileage passed this and the preceding session will consume of rails alone (at the rate of 75 lbs. to the yard) 856,750 tons, or the whole make for two years and a half, allowing nothing for export, though there are many large foreign contracts not yet fulfilled, and the continental demand in future will be enormously increased. The mention of foreign demand brings under our notice the item of *BAR IRON*, of which our exports in a great measure consist. This branch of the trade has been for some time much depressed, arising mainly from the exports to India and the East having falling off materially, being, for the first eight months of this year, only 854*t.* tons, against 22,767 tons in the same period of 1844. We confidently, however, look for a great improvement in this description, arising from the general wants of the country, the renewed foreign demand, and mainly from the impetus given to the manufacture of rails, which can only be effected by removing the power from the manufacture of bars.

But, though the demand for the east is lessened, there seems to be no falling off in the general metal exports of the country, judging from the declared value of exports of iron and steel, as taken from the Parliamentary returns. The increase of the first seven months of the year, as compared with the two preceding, is very great, in spite of the fluctuating and uncertain prices prevailing. They are as follows:—Iron and steel, declared value, 1843, 1,447,399*l.*; 1844, 1,907,151*l.*; 1845, 2,112,299*l.*—showing an increase of 665,000*l.* in two years, or about 45 per cent. Doubtless, an allowance should be made for the increase of price this year over 1843, but even then the increase is large. We have only to add a few words as to the present stock of iron in the country. We have seen no reason to modify, after careful examination, but to confirm the opinion we expressed on the 1st of August last. The founders throughout the country are, without doubt, *bare of stock*, from the present indications of their wants, even without their own admission, which we possess from respectable members of their body, together with the fact, that there never was a period when they were so fully and profitably employed. In Glasgow, the stock has not increased perceptibly for the last six weeks. In the public stores there may be 10,000 tons more of pig-iron, while in the makers' hands there is as much less. As to any immediate increase of the present make, we can see no indications of it, but rather the contrary. Within the last three weeks many furnaces, supposed to have been in full blast, have been standing idle, for want of coal to feed them; the price of coal at the pit mouth is double what it was some months ago, and is scarce even at that advance—while the disposition of the men to strike for higher wages, or betake themselves for a period, as they are apt to do at this season of the year, to harvest employment, renders it extremely probable that, far from any additional furnaces being blown in, considerable exertions will be requisite to keep those supplied with material and men that are already in blast. Such are our views of the present position of the iron trade. We

STATE OF THE MINES AND COLLIERIES' DISTRICTS.

It is now three years since Lord Ashley's Mines and Collieries Act was passed; and an account of its operation would undoubtedly be unsatisfactory, which did not show it to have effected practical good; yet it would be unreasonable to anticipate great results in so short a period. The object of the measure was not the mere removal of females and young children from a dangerous, unhealthy, and altogether unsuitable occupation, but also the restoration of the natural arrangements of family life, as a preliminary to the elevation of a class hitherto all but shut out from the ordinary influences of civilisation.

The second annual report of Mr. Tremenheere, the Commissioner under the Act, proves that a foundation for improvements has at least been laid. The first difficulty in carrying out the act was to enforce the provisions excluding females and boys under ten years from working in the mines. This has not yet been thoroughly accomplished, and unceasing diligence will be requisite in order to effect it. The obstacles in the way are great. First, a number of the females themselves are reluctant to quit an employment to which they have been accustomed; and the men, to whom the additional indulgences procured by the earnings of their wives and daughters are naturally an object, encourage the disposition. Then, there are selfish and short-sighted masters, chiefly the owners of small pits, to whom the cheaper labour of the women is a consideration, who connive at violations of the Act; and motives of a higher, but not less short-sighted, nature induce many managers to encourage the employment of females, under the impression that it is a less evil to let them work than to see them starve. This is the most painful part of the subject. The bulk of the women employed in mines and collieries, who were not thoroughly indurated in their debasing occupation—mothers of families and young girls—rejoiced in the act of their emancipation; and the feeling was reciprocated by that small minority amongst their husbands and fathers, whose more elevated minds had caught rays of light and reason passing over but not penetrating the surrounding gloom. But widows, whose husbands may have perished in their "dangerous trade," also grown-up unmarried women, dependent on their own exertions, or women having disabled parents dependent on them; with inconsiderate, selfish, or worthless, because intemperate and idle, fathers, husbands, and brothers, are not yet reconciled to the change. For widows and grown-up unmarried females much sympathy, and something more, has been, and ought to be, excited. Incapable of other occupation, they have been deprived of that by which they earned a comparative independence; and in places where they are most numerous and helpless, there is not that combination of circumstances exhibited at such an admirably regulated village as Flockton, five miles from Huddersfield, where the resident proprietor set the example of taking three of the colliery girls into his own domestic service, and where, consequently, as we find it recorded in the report, "all the rest who were of proper age have found other permanent employment, and the temporary suffering caused by the change has almost entirely disappeared."

Out of 2400 females employed in coal-pits in Scotland at the time of passing the Act, about 200 were ascertained to be still thus stealthily engaged, last year, though the commissioner thinks that the number is now considerably reduced. The leading proprietors are anxious to put the practice down, though one coal company have very discreditable persevered in tolerating a violation of the Act, their own interest being more their consideration than the giving employment to the females. Recourse has been had to legal authority; convictions have been secured in some cases, in others there has been failure from difficulty of proof, and in some cases legal proceedings are still pending. But there seems little doubt of ultimate success, if there be rigid superintendence and persevering determination. The Act has been much more grossly violated in Lancashire than in Scotland. In the spring of the present year, Mr. Tremenheere was informed, that out of fifty pits, within a radius of five miles round Wigan, females were employed in fourteen, and suspected of being so in six others. One of the most conspicuous of the offenders was a borough magistrate, who had ladders placed openly at his pit's mouth. The commissioner accordingly went down, and laboured, by personal remonstrance, to impress on the coalowners of the district the necessity and importance of obeying the law. He thinks he has succeeded in creating a public opinion on the subject, and intends to compel obedience from the refractory; though, in such a district, crowded with coal-pits, and where, out of 700 or 800 females employed at the time of the passing of the Act, there has been ascertained to be 200 thus still occupied, it is obvious that complete compliance will only be secured by diligent watching and time.

The greater work of changing the habits and character of a class of the community hitherto thoroughly isolated, is yet but in its infancy. A beginning, however, has been made in the great mineral district of Lanarkshire. Here the evils of collier life appeared in their worst form. Houses and people grew up "hap-hazard," as Glasgow advanced with our modern manufactures, and the coal and iron of the surrounding district furnished employment for a rapidly swarming population. Cottages deficient in the most ordinary comforts—squallor, filth, and discomfort, visible everywhere—intemperance, violence, and ignorance, the crowning characteristics of a class, around whom and amongst whom the influences of preaching and teaching—the church, the chapel, and the school—circulated in vain. To this add that thorough want of sympathy between the employers and the employed, arising from ignorance of each other, indifference towards each other, and a supposed antagonism of interests. Mr. Tremenheere says that the great Lanarkshire coal and ironmasters now see all this and deplore it. Such firms as the Messrs. Baird, the Messrs. Wilson, and others, are promising amendment, and intend, in all future erections of cottages, to provide the miners with the means of preserving and attaining the common decencies of life. Unfortunately, the "Union" of the colliers is strongest around Glasgow; and this retards the development of the mutual good feeling. Masters who find themselves in the power of their men, and these men not the most competent judges of what is best, even for their own ultimate interest, are slow in contrating that spirit of wise benevolence, which pauses in its pursuit of profit, to provide for the social, moral, and physical welfare of the workpeople. Mr. Tremenheere enters into copious details, in order to show the injurious effect of the "Union" on the demand for the labour of the workmen themselves. At once to raise wages and to shorten the hours of labour will, in the first instance, compel the master to remunerate himself from the consumer. But competition enables the consumer to drive the master back to his profits, and if he does not or cannot submit to a reduction, he is driven out of the market. All this, which Mr. Tremenheere illustrates by striking examples, is plain to men of ordinary education and common sense; but it is beyond the reach of an untaught, and, too frequently, an unreasoning collier. And there is great excuse for him. He earns full wages at seventeen; he works in danger and in darkness; he feels himself getting old from thirty-five; from forty-five to fifty his ranks as an aged, and, frequently, a disabled man. The collier looks only to the profit of the master, which he thinks can afford a little paring down in order to afford an increase of wages and shorter hours of labour. Or if the profit cannot stand it, the consumer will. We deplore the error of the collier, for his own sake; but the doctrines taught and enforced by the Lanarkshire Union are but another form of those, which, in 1841, carried a general election, routed a ministry, were advocated by the noble and the wealthy, and were supposed to constitute the stem and branches of the British constitution. In contrast with the general condition of the collier community throughout Britain, there are some remarkable instances where care and kindness have evinced what may be done. One of these is a happy collier community of about 120 families, connected with a coal-pit a mile and a half from Kilmarnock, and which is the property of the Duke of Portland. The picture drawn of this community by Mr. Tremenheere is as interesting as it is beautiful, and shows what may be effected if we only set about it in the right way. The people are comfortable, cleanly, industrious, temperate, and religious; the children, unlike those of other districts, surrender their earnings to their parents up to the time of marriage, and are thus preserved from vices which abound amongst the youth elsewhere; there are schools, libraries, benefit and saving societies, and a very considerable proportion of the youth have struggled upwards into other professions, sacred and civil. Other districts present similar examples. At Flockton, near Huddersfield, where the resident proprietor, Mr. Stansfield, devotes his mind to the welfare of his workpeople; at Earl Fitzwilliam's collieries, near Wentworth and Rotherham; at the Waterloo Colliery, near Leeds; and other places, there are abundant proofs of what may be accomplished when benevolent proprietors and agents untiringly and intelligently exert themselves, undiscouraged by occasional temporary instances of ingratitude. If further evidence were required, we may point to the Low Moor Iron Company's collieries, near Bradford, at which a most rapid progress has been made in educating the youth employed. Four

years ago only two in ten could read, out of 1100 employed; now, out of 494 boys, between ten and eighteen, at work, there are 411, or 83 per cent., who can read. Altogether, the report of Mr. Tremenheere affords sufficient encouragement to induce us to persevere in the firm conviction that ere long we shall succeed in humanising even colliers.

Original Correspondence.

THE ELECTRIC GUN.

SIR.—The allusion to the "electric gun" reminds me of views I have long entertained respecting the all but universal application of this subtle and powerful, yet easily managed and controlled, agent. Its substitution for the match in firing cannon, above all, in the case of firing signals of distress, when, by reason of the waves breaking over the ship, the former may not be available, is so obvious, that any comment were superfluous; the rupture of rocks, too, by inflammable vapours mingled with air, and exploded by its agency: all these, and many more, emphatically proclaim the potency of its spell. That the simultaneous and instantaneous ignition of our gas lamps in cities and towns, will, ere long, be substituted for the present slow and irregular method, as I have so long pointed out, it requires no seer to foretell, and its ultimate application to projectiles from the expansion produced by its agency, is as sufficiently apparent. I confess, however, that I am astonished it has never been enlisted into the service of the steam-engine, when every sound reflecting mind, and clear intellect, must readily perceive that it must ultimately do away with the present employment of fuel and boilers, and their auxiliaries. I have no pretensions to the vision of the prophetic vista, when I venture to predict that the time is not far distant when the globe will be circumnavigated by the agency of electricity. In my work on atmospheric electricity, on the question of paragnées, I have stated that the influence of climate may even be modified by it. The production of ice for dietic and medical purposes, may also, no doubt, be effected by means of electricity in the intense cold consequent on the expansion produced by it. J. MURRAY.

Portland-place, Hull, Sept. 4.

IRON HOUSES, &c.

SIR.—The universal application of iron for warehouses, dwellings, sailing-vessels, and steamers, &c., naturally elicit very curious and important inquiry. Their influence in reference to lightning or atmospheric electricity, involves, as a matter of course, their salubrity, as far as human health is implicated. Besides, the material is not only a conductor in its relations to atmospheric electricity, but temperature. To be insulated or encased by non-conducting materials, places us in a very different position compared with its direct antagonism. It is true iron is among the worst conductors, both of heat and electricity. The dampness or humidity of the included atmosphere will be materially modified by a metallic shrine; of course, an iron wall will be always damp. Iron walls in contact with the earth will have a direct and immediate influence in relation to ascending electricity, as well as terrestrial heat. What may be their influence in countries convulsed by earthquakes it is difficult to divine. It is singular that the iron steamers on the coast of Africa escaped, while others were struck, and this I have elsewhere ventured to explain. Iron bridges have escaped, while vessels in juxtaposition have been struck; iron foundries and forges, iron yards, &c., generally escape, but instances have occurred both in this country and America, where the latter have been struck by lightning, and considerable damage occasioned. I confess I should not like to pitch my tent near an iron walled house, without the protection afforded by lightning conductors. I merely throw out these general remarks, as suggesting topics of reflection for the electrician.

Hull, Sept. 4.

[What would our respected correspondent say if the "iron wall" were galvanised?]

THE TOBACCO PIPE.

SIR.—I have lately repeatedly seen in this country *meerchaum pipes* blazoned forth for sale in cigar-shops. The *meerchaum*, or *écume de mer*, belongs to that class of minerals which includes the "soapstone," mica, talc, *lapic olaris*, asbestos, amianthus, &c., and the characteristic constituent of which is *magnesia*. I cannot immediately perceive that there is any deleterious ingredient in *meerchaum*, but German medical men have pronounced an opinion hostile to the use of *meerchaum pipes*, in consequence of their deleterious effects. I merely mention the circumstance, not being *practically* a judge in such matters, as I do not use tobacco in any shape or form—indeed, I consider it a most pernicious habit, but let every one "be fully persuaded in his own mind." Certain it is, that among the tens of thousands of pipes, I have seen in active use on the continent, not one of these was of *meerchaum*. All those used in Germany have *porcelain* bowls, and often are prettily painted; many hundreds have I seen suspended in a single window both at Cologne and Coblenz, and have often stood and admired their elegant and tasteful paintings and decorations. An intelligent student of the University of Bonn informed me that sometimes the painting on the porcelain bowl of a single pipe has cost above twenty-six thalers—that is, 4*l.* sterling!—J. MURRAY: Portland-place, Hull, Sept. 3.

IRON PLATE "PUNCH."

SIR.—In reply to Dr. Murray, allow me to state that this is an age of re-invention, one-half of the world not knowing what the other half are about. The manner in which we have been used to punch plates for boilers of steam-engines in Cornwall is by means of a long lever, a fly-wheel, and a vertically revolving arm, with two rollers, one at each end, the weight of the lever raising the *punch*, which is again depressed, as one of the rollers rises in its revolution under the longer arm of the lever. That my plan has been tried and succeeded for twenty or thirty years in the north, is a proof of the utility of the invention, if also applied in the far west! Solomon said long ago, that "there's nothing new under the Sun." It's something to spread the knowledge of the unknown, and this, the inventor, "in arrear with Time," has done, and so has Dr. Murray, in his more splendid original communications on other matters—nothing that elicits a line from the Doctor is written in vain.—Penzance, Sept. 8. A. T. J. MARTIN.

[Mr. Martin is wrong in attributing the letter to Dr. Murray: on again referring, he will find it emanated from our correspondent, "Ferrum."]

MECHANICAL CERTAINTY OF RAILWAYS—RUNNING OFF.

SIR.—Mr. Martin's remarks in your Journal respecting trains running off the rails, I think would not prove a remedy, the central plate of one foot high would be liable to snap in case of much pressure, and would be very inconvenient on road crossings, &c. I would suggest the following remedy—the engines and carriages to be made with a double rim round the wheels, so as to fit the rail on both sides, and also a tube placed between the rails, and attached to the engine, similar to the atmospheric mode, but worked without the chemical preparation; I think the latter mode would have the desired effect. The above remarks in your Journal of next week, will oblige—JAMES SHEPHERD: Stockton, Sept. 3.

Several methods have been suggested to prevent trains running off the rails; among them, one by Major Parby, admirably calculated to effect the desired object, and has met the entire approval of General Pasley—the model of which can be inspected at our office; there is besides Prosser's guide wheel, expressly intended to meet the desideratum, and which is fully described in another column.]

SCIENTIFIC WORKING IN COLLIERIES.

SIR.—Dr. John Murray supposes that all the individuals who have lost their lives by fire-damp explosions, are so many lives sacrificed to the carelessness, recklessness, or greediness, of coal owners, and their managers of the mines, and he seems to think that the Government can (and hopes they will) enact laws to compel coal mines to be worked on scientific principles. Does Dr. Murray suppose that one scientific plan will be proper for all fiery collieries, dissimilar to each other? Let the Doctor know, that some collieries are so pestered with faults, and those faults so derange the regular workings, that no one system can be followed, while hundreds of schemes are adopted to overcome difficulties which neither Dr. Murray, nor any other merely scientific man, knows anything about. I have no objection to any opinion of gentlemen, learned in science, but I know right well, that if the whole of them were consulted, and our law givers turned over to their assistance, without the aid of practical men, it would be all a farce, as was the Haswell Commission: and after all that could be, or can be, done, there will be fires in coal mines; but there might be means used to prevent such destruction of human life, from the after damp, as takes place in the north of England mines.—T. DEAKIN: Blaenavon, Sept. 8.

IRON FURNACES IN FRANCE.—In continuation of the notice in last week's *Mining Journal*, on the improvements making throughout France in the manufacture of iron, we continue the subject by departments:—*Moselle*.—

At the works of Hayange three steam-engines have been erected, of the force of 110 horses power, for working the bellows and flattening machines. These engines are heated by gas from the high furnaces and puddling ovens. The fires of the affinage of these works are blown by heated air during the melting of the metal, and by cold air during what may be called the refining. At the works of Moyeuvre, Jamailles, Gorye, and Mutterhausen, the gas from the high furnaces and the refining fires is supplied by the furnaces of the steam-engines. *Nord*.—Three English forges have been constructed and are now at work at Crespin, Maubeuge, and Haumont on the Sambre, the production of which will be very great. In these new works, like those of Ferrières, d'Anzin, and Donain, the steam-engines are heated by gas from the different reverberatory furnaces. *Pas-de-Calais*.—At the works of the Marquis Bourguignon the whole of the high furnaces are at work since 1844, and are remarkable for the tenacity of their metal. At the high furnaces of Marquise coke and anthracite used to be consumed, but now they have greatly improved it, and the furnaces render a good metal. *Rhin (Upper)*.—Here they have adopted the cold process for refining. *Rhone*.—At the works of Givors the gas from the high furnaces are equally applied to the heating of the apparatus from the fire of this high furnace, as to that of the steam-engine which works the bellows. In the works belonging to the mines of Cheseby and St. Bel, the copper ores, which are to be melted by hand ovens, are roasted in closed vases, with a preparation of sulphuric acid; after which the pyrites roasted in sulphates are transformed, leaving them exposed to the air, and washing them with water, containing a small quantity of sulphuric acid, they are then precipitated into a solution of copper in its metallic state by means of old iron—this process allows them to mix with advantage poor ores, that do not contain more than 1*l.* per cent. of copper. *Saône-et-Loire*.—The works of Creusot have been greatly increased, a high furnace with coke of fourteen metres in height has been erected, besides the four already existing, worked by heated air. It has been found, that by mixing a certain quantity of lime in the puddling furnaces there is a great benefit derived, which is done after the melting of the metal. The steam-engines, which work the bellows of the high furnaces of these works, are nearly all heated by the gas of the furnaces, and the steam-engines which propel the flattening and drawing are also heated, in a great measure, by the gas arising either from the puddling ovens, or the refinery by charcoal. The apparatus for compressing consists in a press, with a large hammer, and several vertical hammers. Several flattening machines have been constructed, which will be propelled by a cylindric and horizontal steam-engine, of 100-horse power. At the works of Verderat the furnaces that receive sheet and cast-iron for the making of tin, are only heated with gas from the refining fires in the Comtois system, which, notwithstanding the economy, has the advantage of greatly improving the produce of the ovens.

CIVIL ENGINEERING ON THE CONTINENT.—England has ever been renowned for her civil engineers, from the time of Watt, her Telford, the Stephensons, the Rennies, Locke, Cubitts, and hundreds of others, have made her look upon by foreign nations as the great seat of invention and civil engineering. Not a railway is constructed either in France, Belgium, Germany, Russia, Spain, Portugal, Italy, the Americas, and the Indies (East and West), but an English civil engineer is consulted for plans and estimates, as all speculators, be of what nation they may, have more confidence in that profound judgment he evinces, to their own. Civil engineering has always been a study peculiar to this nation: being one of the most commercial powers, they have had to invent machinery for the extensive manufactory of cotton, woollen, &c., with which she abounds in Yorkshire and other parts; and for the working of her astounding iron and steel factories, her wealthy coal, iron, copper, lead, and tin mines; her vast and opulent steam navy, where, by the force of engines propelled by a power unknown generally half a century ago, they now cross the wide Atlantic, the Indian Seas, Mediterranean, Bay of Biscay, from the shores of Spain to the Baltic, with the same facility as formerly from London to Gravesend; her locomotives on railways: in fact, machinery is used in every branch for the welfare of the human race, but particularly our working and manufacturing classes, who formerly were in a state of an oppressive slavery, by toil, worse than ever were those of the West Indies. It is, therefore, to the civil engineer—to his inventive and enterprising mind—that mankind in general is indebted for the benefits they now daily experience from machinery and the working of our mineral resources of Cornwall, Wales, Staffordshire, and other counties, for wherever there is ore, the machine is in operation. It is our engineers that excited the stimulus and enterprise which is now developing itself, not only all over France and Belgium, but the whole continent of Europe, to the far distant climes of North and South America and India. The powers of Europe, involved as they had been for nearly half a century in most afflicting wars, either with the Emperor Napoleon, or the republican dynasty of Robespierre and his confederates, had but little time to devote to the advancement of science, excepting that of military tactics. Napoleon established the military schools, St. Cyr, Saumur, the Polytechnic, and others, but nothing but military engineering, the forming redoubts, batteries, &c., to the greatest advantage was then the study of the rising generation. The blessings of thirty years' peace has produced the greatest benefits to science and commerce all over the world; schools of civil engineering are being established in nearly every department throughout France, in Belgium, and the whole of the north of Europe; they are not only taught engineering in all its branches, but also mining operations, so as not only to be enabled to examine their mineral productions, but to work them. The progress of railways that is now making on the continent, has seriously occupied the attention of the different Governments to strongly encourage this branch of engineering science among the present youthful generation. The monopoly that has been practised for so many years over that particular study, has caused an emulation and jealousy to compete with us from one end of the continent to the other; and many of the railway companies are having their own locomotives made on their own establishments, as well as steam-engines for manufactory and vessels, sooner than come to England, although they are aware of their inferiority compared with those constructed by the English civil engineer.

X THE EFFECTS OF SEA WATER ON IRON.—In the course of the late Government inquiry on establishment of harbours of refuge, Professor Faraday furnished some interesting particulars, respecting the effects of sea water on iron. His observations had unfortunately been rather limited, and confined to the question of cast-iron. Between this body and sea water he considers the action to be vigorous, and greatest in the water near the surface; less in deep water, and least of all when the iron is buried in sand or earth, or building materials (into which the water may penetrate), for then the oxide and other results formed are detained, more or less, and form sometimes a cement to the surrounding matter, and always a partial protection. Soft cast-iron corrodes more rapidly than hard cast, and than the brittle white iron. As to the amount of corrosion in any given time, Professor Faraday had not an opportunity of observing any good and satisfactory cases of illustration. In estuaries and the mouths of rivers, he considered it probable that great differences of corrosion would arise from the different circumstances of variable saltiness; the soil of the river, if near a town, will much affect the metal; thus, a wharf of cast-iron might occasionally be greatly injured, by making fast to it vessels that are copered, using iron cables. As to the protection of iron, with respect to the permanency of a coat of paint, or tar, or bituminous matter, the only experience the Professor had, was in a case where coated iron, sheathed for vessels, was brought under his notice. He was then much impressed with the thorough adhesion of the coat to the iron. Zinced iron would resist the action of the sea water, as long as the metal would crust the surface, but zinc dissolves rapidly in sea water, and after it is gone, the iron would, of course, follow. As to voltaic protection, Professor Faraday considers that the cast-iron piles, proposed for light-houses or beacons, might be protected by zinc, in the manner proposed by Sir Humphry Davy, to protect copper by iron, but, even in that case, the corrosion of the zinc would be very rapid. If not found too expensive, the object would be to apply the zinc protectors in a place where they could be examined often, and replaced when rendered ineffective; in this manner, he entertains little doubt that iron could be protected in sea water. It is even probable that, by investigation and trial, different sorts of iron might easily be distinguished and prepared, one of which would protect the other: thus soft cast-iron would probably protect hard cast-iron, and then it would be easy to place the protecting masses where they could be removed when required. Hence, though iron be a body very subject to the action of sea water, Professor Faraday considers not unlikely that it might be used with advantage in marine constructions, intended to be permanent, especially if the joint effects of preserving coats of voltaic protectors were applied.

ATMOSPHERIC RAILWAY GAZETTE.

WARWICK AND WORCESTER RAILWAY.

(Provisionally Registered under 7th and 8th Vic., c. 110.)
Capital £790,000, in 35,000 Shares of £20 each.—Deposit £2 2s. per Share.

No shareholder to be liable beyond the amount of his subscription.

PROVISIONAL COMMITTEE.

The Right Hon. Lord Leigh, Stoneleigh Abbey, Warwickshire.
Sir Francis Shuckburgh, Bart. Shuckburgh Park, Warwickshire.
Sir William Wynn, Macclesfield, chairman of the North Wales Railway.
Sir Henry Winston Barrow, Bart. M.P. director of the Waterford and Kilkenny Railway.
Sir William Bacon Johnstone, Bart. Hilton, Aberdeenshire, director of the Chepstow and Forest of Dean Railway.
Sir John E. de Beauvoir, Bart. chairman of the London and Birmingham Extension Railway.

Sir George William Prescott, Bart. director of the Chester and Manchester Railway.
Sir William Lloyd, Bart. Bryn-Eslyn, near Wrexham, director of the Trent Valley Continuation Railway.
Sir Samuel Brown, M.P. director of the Dieppe and Paris Railway.
Sir John Hare, F.S.A. Langham-place, director of the London and Manchester Railway.

William Bulkeley Hughes, Esq. M.P. chairman of the Welsh Midland, and director of the Leicester and Bedford Railway.

Abraham Alexander, Esq. Lullingstone House, Warwick.

John Anderson, Esq. E.I.C.S. Euston-place, Euston-square.

William Fecchey Black, Esq. Wilton-place, Belgrave-square, director of the Italian and Austrian, and London and Birmingham Extension Railways.

Joseph Brown, Esq. London, director of the Oxford, Glos., and Southampton, and Manchester and Birmingham Continuation Railways.

John Burgess, Esq. Brougham-place, Manchester, director of the Nottingham and Boston Railway.

Charles Bradley, jun. Esq. Birmingham, director of the Manchester and Birmingham Continuation.

Major Chase, Nottingham-place, London, director of the Madras Railway Company.

Henry Chaytor, Esq. Clerkenwell Castle, Darlington.

Richard Carpenter, Esq. magistrate of the county of Middlesex, and deputy-chairman of the London and Birmingham Extension Railway.

Charles Collins, Esq. Caldwell Hall, Worcestershire.

Col. Robert Douglas, Royal Artillery, United Service Club, director of the Bideford and Tavistock Railway.

Peter Henry Edlin, Esq. Brick-court, Temple, London, director of the London and Birmingham Extension Railway.

Col. Wm. Frederick Kirkgton, Wyndham-place, Bryanston-square, London.

John Fagan, Esq. Gloucester-road, Brompton, director of the South and Midlands Junction Railway.

Capt. Seth N. Fisher, Junior United Service Club, director of the London and Birmingham Extension Railway.

Col. Fitch, York-terrace, Regent's-park, director of the South Midlands Railway.

Capt. William Ford, Royal Marines, Leamington.

John Grant, Esq. Northampton, director of the London and Birmingham Extension Railway.

John Gay, Esq. South-street, Finsbury, London, director of the London and Birmingham Extension Railway.

Giles Hall, Esq. Bourton-on-the-Water, Gloucestershire.

Richard Harris, Esq. Kington, Northampton.

Lewis Harrison, Esq. Daventry.

James Headly, Esq. Market-hill, Cambridge.

James Hitchins, Esq. coroner for the city and county of Lincoln.

The Mayor of Worcester.

Lewis Levy, Esq. Tavistock-square, London.

Jonathan Hopkinson, Esq. Chester-square, London, director of the Liverpool and Ormskirk Railways.

John Howell, Esq. St. George's-terrace, Hyde-park, director of the Liverpool and Ormskirk Railways.

1. Douglas Hopkins, Esq. Bedford-square, London, director of the London and Birmingham Extension Railway.

Sam. Haynes, Esq. Birmingham, director of the Leicester & Birmingham Railway.

Roger Hollinsworth, Esq. Birmingham, director of the Trent Valley Continuation Railway.

Frederick Jones, Esq. Lincoln's Inn, London, director of the London and Birmingham Extension Railway.

Thomas Kelly, Esq. Alderman of the City of London.

George Lawton, Esq. George-st., Hanover-sq. director of the South Midland R.R.

Thomas Lee, Esq. Daventry.

William Linnell, Esq. Fircroft, Northamptonshire.

T. Linnell, Esq. Northampton, director of the London and Birmingham Extension Railway.

John Manning, Esq. Harpole, Northampton.

John Manning, Esq. Kington, Northampton.

John Marshall, Esq. Magistrate, Northampton.

John Mollard, Esq. Marlow House, Warwick, director of the London and Birmingham Extension Railway.

Peter Morrison, Esq. managing director of the Britania Insurance Company.

George Nelson, Esq. Hill House, Warwick.

George Parbury, Esq. Russell-square, director of the East and West of England Junction and Trent Valley Continuation Railways.

William S. Potter, Esq. Sussex-gardens, Hyde-park, director of the South and Midland Junction Railway.

Henry James Parsons, Esq. Warwick.

Richard Cowley Polhill, Esq. Brompton, Middlesex.

John Reddell, Esq. Dallington Hall, Northampton.

James Russell, Esq. Gloucester-place, Portman-square, London.

William Shaw, Esq. managing director of the Farmers' and General Fire and Life Insurance Institution, and director of the London and Birmingham Extension R.R.

Thomas Shaw, Esq. Northampton.

Henry Lewis Smale, Esq. Willoughby-house, Totnes, director of the London and Dover Railway.

John Snelling, Esq. Upton Hall, Northampton.

Charles Spicer, Esq. R.S.P. Portman-square, director of the Armagh and Coleraine Railway, &c.

Riched Tibbits, Esq. Leamington.

Joseph Thomson, Esq. director of the London and Brighton Railway.

Thomas Hammond Tooke, Esq. director of the London and Birmingham Extension Railway.

Joseph Underwood, Esq. The Park, Blackheath.

Frederick Foxeaux Weiss, Esq. Chester-terrace, Regent's-park, London, director of the London and Birmingham Extension Railway.

Captain Frederick Bayley Wardenor, Brompton Crescent, Brompton, director of the London and Windsor Railway.

Joseph Willcox, Esq. Warwick.

John Edward Wilson, Esq. Grove Hall, Market Drayton, director of the Trent Valley Continuation Railway.

William Wilson, Esq. M.D. Devonport-street, Sussex-square, Hyde-park.

The names of a very influential Local Committee, already formed in Worcester, will shortly be added to the above list.

BANKERS.

London—The Commercial Bank, Lombardy.

Northampton—The Northampton Union Bank, Samuel Percival, Esq. manager.

Daventry—Branch of the Northamptonshire Union Bank.

Warwick—The Warwick and Leamington Banking Company.

St. Albans—The Warwick and Leamington Banking Company.

Consulting Engineers—Sir John Macneill, LL.D. F.R.S., and James Thomson, F.R.S.E. M.R.I.A.

ENGINEER—William B. Prichard, Esq. C.E. F.A.S.

SOLICITORS.

Messrs. Wright and Hanbury, 11, Finsbury-place South, London.

Messrs. Bedford and Pidcock, Worcester.

Thomas Cave Hall, Esq. Northampton.

This direct communication between the populous towns of Warwick and Worcester will complete the great chain of railways from Boston, Peterborough, and Northampton, to the grand focus of western railways—the city of Worcester. The Warwick and Worcester Railway will not be in competition with any existing lines; on the contrary, it will very materially aid the railways already established for the accommodation of these cities. To the proposed Oxford and Birmingham Junction Railway, it must prove an important auxiliary; and by means of the London and Birmingham Extension Railway, it will open up to Worcester the most direct intercourse with Leamington, Northampton, Peterborough, and the eastern counties—while to Warwick and its rich and populous neighbourhood, it will afford the most convenient access, not only to Worcester, but to Shrewsbury, Hereford, Monmouth, and the great manufacturing towns in the north-west and south of England, in course of connection by the Oxford, Worcester, and Wolverhampton Railway, and the several projects for the accommodation of North and South Wales.

By means of the proposed extension of the Oxford, Worcester, and Wolverhampton Railway to Porthdynllaen, in Carnarvonshire—to carry out which, that company is pledged for the full completion of its important scheme—the Warwick and Worcester Railway will confer another important boon on all the towns connected with its termini by the great chain of railways running eastward.

In connection with the London and Birmingham Extension Railway, it will give to the eastern counties to the populous towns of Northampton, Peterborough, Bedford, Cambridge, &c., the most direct means of communication with Dublin, and the ports on the eastern coast of Ireland. To the numerous visitors annually attracted to Leamington from the north and south of Ireland, as well as from central Wales, the Warwick and Worcester Railway must, at the same time, prove of the highest utility. It may also be expected that the amount of passenger traffic from the manufacturing town of Worcester and its vicinity, which the projected line will unquestionably draw to that fashionable watering-place, will be a source of very considerable income.

The line has been carefully surveyed by the company's engineer, whose report is highly satisfactory as to the possibility of avoiding all unfavourable gradients and interference with ornamental property, without any material sacrifice of directness of route.

The Warwick and Worcester Railway will commence at Warwick, at the united stations of the London and Birmingham Extension Railway, and the Birmingham and Oxford Junction Railways, and thence proceed, *via* Alcester, to Worcester, there to unite with the Oxford, Worcester, and Wolverhampton Railway. A branch will be made to Droitwich.

The allotment of shares, local and landed interests will of course receive the consideration to which their importance entitles them. Powers will be applied for in the bill to allow interest at the rate of 4 per cent. per annum on all deposits and calls from the time of payment until the completion of the line.

Applications for shares, plans, prospectuses, and detailed information, may be made at the offices, No. 15, Old Jewry-chambers, London; and at the office of the company's solicitors, Messrs. Wright and Hanbury, 11, Finsbury-place,

South, London, of the local agents:—Messrs. Bedford and Pidcock, Worcester; Thomas Cave Hall, Esq. Northampton; Thomas Orton Gery, Esq. Daventry; and Robert Tibbits, Esq. Warwick; and at the offices of the following stock and sharebrokers:—Mr. Hanbury, 4, Angel-court, Throgmorton-street, London; Messrs. Houghland and Leese, 51, King-street, Manchester; Mr. Morris Reynolds, Barnard's-buildings, Liverpool; Messrs. Collinson and Flint, Hull; Messrs. Hicks and Co., Alfred-street, Bow-lane, Leeds; Messrs. Hugh, Munro, and Co., Edinburgh; Mr. William Bolton, Stratford-upon-Avon; Mr. Thomas Sandford, Exeter; Messrs. Hepwood and Palmer, Plymouth; Mr. John Wright, Union-passage, Birmingham; Mr. T. W. Powell, 2, Wellington-street, London; and Mr. I. N. Balm, Gloucester.

11, Finsbury-place South, London.

FORM OF APPLICATION FOR SHARES.

To the Provisional Committee of the Warwick and Worcester Railway.

Gentlemen,—I request you will allot me shares of £20 each in the above-named company, and I hereby undertake to accept the same, or such less number that may be allotted to me, to pay the deposit of £2 2s. per share thereon, and to sign the subscriber's agreement and Parliamentary contract when required.

Dated this day of 1845.

Name in full
Profession or Business
Residence, Private and Professional
Reference
.....

WARWICK AND WORCESTER RAILWAY.—In consequence of the numerous applications for shares in this company, the provisional committee hereby give Notice, that NO APPLICATIONS FOR SHARES will be received after MONDAY, the 15th inst., except from parties locally interested, whose applications will be received until the 18th inst.

By order of the committee,

WRIGHT and HANBURY.

SHEFFIELD, NOTTINGHAM, AND LONDON DIRECT RAILWAY.

This line will commence at Sheffield, and proceed through Nottingham to Kettering, where it will fall into the London and Manchester Direct Railway. It cannot fail to be matter of surprise that the large and important manufacturing town of Nottingham should so long have remained unaccommodated with a more direct and independent line of railway to London than the existing circuitous route, and that, too, made up of several sections. This surprise increases upon observing that a direct line through Nottingham presents also a much shorter and a more direct and independent course from London to the great trading mart of Sheffield, and, consequently, to Leeds also, and all the interjacent district, embracing the eminently manufacturing towns of Rotherham, Barnsley, Huddersfield, Wakefield, Pontefract, Halifax, and Bradford.

The present project is undertaken to supply this required desideratum, and it will at the same time afford immediate railway communication with the important towns of Chesterfield, Mansfield, Melton Mowbray, Uppingham, and Rockingham, which towns now seriously feel the want of such accommodation.

The most laboured detail of description as to the amount of traffic and profit which this railway is likely to command would fall very short of the estimate which every intelligent person is likely to form for himself when he considers the rich, populous, industrial, and enterprising districts through which this railway will pass, and the density of commercial and manufacturing interests immediately upon its terminus to Sheffield, and in the crowded district between Sheffield and Leeds. Every arrangement will be made for application to Parliament in the ensuing session.

Full prospectuses, with the names of a powerful and influential committee, will be ready in the early part of next week.

Applications for shares in the usual form, to be made to the solicitors—John Owens, Esq. 35, Moorgate-street; A. W. Arnold, Esq. 31, Golden-square, and William Rogers, Esq. Bedford, and to the following sharebrokers:—Messrs. Preece and Evans, 39, Lothbury; Mr. Miles, Worcester; Mr. Thomas Henry Wheeler, Worcester; Messrs. Townley and Whitehead, Liverpool; Messrs. Cameron and Co., Liverpool; Mr. Morris Reynolds, Liverpool; Mr. Richard E. Hine, Macleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. Frederick Stamp, Hull; Mr. Thomas Boardman, Blackburn; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eyre and Shaw, Derby; Messrs. Graystone and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Exeter; Mr. J. S. Holland, Coventry; Messrs. Houghland and Leese, Manchester; Messrs. Cardwell and Sons, Manchester; Messrs. Birchall and Co., Manchester; Messrs. T. N. Bardwell and Sons, Sheffield; Mr. W. H. Collier, Birmingham; Mr. L. Weatherburn, jun., Huddersfield; Messrs. Everard and Co., Huddersfield; Messrs. Payne and Freer, Leicester; Mr. Nicholson, Edinburgh; Messrs. Duncan and Hutchinson, Glasgow; Messrs. Labertouche and Stafford, College-green, Dublin.

100

BIRMINGHAM AND LICHFIELD RAILWAY.

(PROVISIONALLY REGISTERED.)

line will also form the nearest route from Derby and the north to Birmingham. The capital proposed to be raised is £300,000, in 30,000 shares of £20 each. A deposit of £2 2s. per share will be required to be paid upon the allotment to the credit of the directors with the bankers of the company.

No call will be made until the Act of Parliament shall be obtained, and power will be taken in the Act to allow interest at 4 per cent. per annum, upon the amount of each call, from the date of payment until the opening of the line, and subscribers will not be answerable beyond the amount of their shares. The Subscribers' Agreement and Parliamentary Contract, which shall contain a clause empowering the directors to amalgamate with any other railway now formed, or to be formed, to extend or make branch lines, or transfer, mortgage, or dispose of the present undertaking for the benefit of the company, as they may deem proper, will be ready on the day fixed for the payment of deposit, and will be required to be executed when the bankers' receipts are exchanged for certificates of scrip; and the shares of any subscribers making default in the execution of those deeds within the time limited, of which fourteen days' notice will be given, will be absolutely forfeited.

No application for shares can be attended to, unless accompanied by a reference to a member of the provisional committee, one of the solicitors, agents, or a banker.

Forms of applications for shares, copies of the prospectus, and a map of the line, may be obtained at the temporary offices of the company, 60, Moorgate-street, London; from the solicitors; from the local agents; from Mr. B. Williams, 17, Throgmorton-street, London; Mr. A. Sym, 9, Tokenhouse-yard, London; Mr. W. H. Collis, 104, New-street, Birmingham; Messrs. Ludlow Brothers, and Messrs. Pownall and Worthington, Liverpool; Mr. John Barlow, Manchester; Messrs. Robinson and Furlay, Leeds; Mr. Thomas Evans, Milson-street, Bath; Messrs. Ellwood and Harrison, Leicester.

BIRMINGHAM AND LICHFIELD RAILWAY.

FORM OF APPLICATION FOR SHARES.

To the Provisional Committee of the Birmingham and Lichfield Railway Company.

Gentlemen,—I request you will allot me shares of £20 each in the above company; and I undertake to accept the same, or such smaller number as may be allotted to me, and to pay the deposit of £2 2s. per share thereon, and to execute the subscribers' agreement and Parliamentary contract when required.

Dated this day of 1845.

Name in full
Residence
Profession or Business
Reference
Address
.....

DIRECT EAST AND WEST JUNCTION RAILWAY,

STATE OF THE MINES AND COLLIERIES' DISTRICTS.

It is now three years since Lord Ashley's Mines and Collieries Act was passed; and an account of its operation would undoubtedly be unsatisfactory, which did not show it to have effected practical good; yet it would be unreasonable to anticipate great results in so short a period. The object of the measure was not the mere removal of females and young children from a dangerous, unhealthy, and altogether unsuitable occupation, but also the restoration of the natural arrangements of family life, as a preliminary to the elevation of a class hitherto all but shut out from the ordinary influences of civilisation.

The second annual report of Mr. Tremenheere, the Commissioner under the Act, proves that a foundation for improvements has at least been laid. The first difficulty in carrying out the act was to enforce the provisions excluding females and boys under ten years from working in the mines. This has not yet been thoroughly accomplished, and unceasing diligence will be requisite in order to effect it. The obstacles in the way are great. First, a number of the females themselves are reluctant to quit an employment to which they have been accustomed; and the men, to whom the additional indulgences procured by the earnings of their wives and daughters are naturally an object, encourage the disposition. Then, there are selfish and short-sighted masters, chiefly the owners of small pits, to whom the cheaper labour of the women is a consideration, who connive at violations of the Act; and motives of a higher, but not less short-sighted, nature induce many managers to encourage the employment of females, under the impression that it is a less evil to let them work than to see them starve. This is the most painful part of the subject. The bulk of the women employed in mines and collieries, who were not thoroughly indurated in their debasing occupation—mothers of families and young girls—rejoiced in the act of their emancipation; and the feeling was reciprocated by that small minority amongst their husbands and fathers, whose more elevated minds had caught rays of light and reason passing over but not penetrating the surrounding gloom. But widows, whose husbands may have perished in their "dangerous trade," also grown-up unmarried women, dependent on their own exertions, or women having disabled parents dependent on them; with inconsiderate, selfish, or worthless, because intemperate and idle, fathers, husbands, and brothers, are not yet reconciled to the change. For widows and grown-up unmarried females much sympathy, and something more, has been, and ought to be, excited. Incapable of other occupation, they have been deprived of that by which they earned a comparative independence; and in places where they are most numerous and helpless, there is not that combination of circumstances exhibited at such an admirably regulated village as Flockton, five miles from Huddersfield, where the resident proprietor set the example of taking three of the colliery girls into his own domestic service, and where, consequently, as we find it recorded in the report, "all the rest who were of proper age have found other permanent employment, and the temporary suffering caused by the change has almost entirely disappeared."

Out of 2400 females employed in coal-pits in Scotland at the time of passing the Act, about 200 were ascertained to be still thus stealthily engaged, last year, though the commissioner thinks that the number is now considerably reduced. The leading proprietors are anxious to put the practice down, though one coal company have very discreditably persevered in tolerating a violation of the Act, their own interest being more their consideration than the giving employment to the females. Recourse has been had to legal authority; convictions have been secured in some cases; in others there has been failure from difficulty of proof, and in some cases legal proceedings are still pending. But there seems little doubt of ultimate success, if there be rigid superintendence and persevering determination. The Act has been much more grossly violated in Lancashire than in Scotland. In the spring of the present year, Mr. Tremenheere was informed, that out of fifty pits, within a radius of five miles round Wigan, females were employed in fourteen, and suspected of being so in six others. One of the most conspicuous of the offenders was a borough magistrate, who had ladders placed openly at his pit's mouth. The commissioner accordingly went down, and laboured, by personal remonstrance, to impress on the coalowners of the district the necessity and importance of obeying the law. He thinks he has succeeded in creating a public opinion on the subject, and intends to compel obedience from the refractory; though, in such a district, crowded with coal-pits, and where, out of 700 or 800 females employed at the time of the passing of the Act, there has been ascertained to be 200 thus still occupied, it is obvious that complete compliance will only be secured by diligent watching and time.

The greater work of changing the habits and character of a class of the community hitherto thoroughly isolated, is yet but in its infancy. A beginning, however, has been made in the great mineral district of Lanarkshire. Here the evils of collier life appeared in their worst form. Houses and people grew up "haphazard," as Glasgow advanced with our modern manufactures, and the coal and iron of the surrounding district furnished employment for a rapidly swarming population. Cottages deficient in the most ordinary comforts—squallor, filth, and discomfort, visible everywhere—intemperance, violence, and ignorance, the crowning characteristics of a class, around whom and amongst whom the influences of preaching and teaching—the church, the chapel, and the school—circulated in vain. To this add that thorough want of sympathy between the employers and the employed, arising from ignorance of each other, indifference towards each other, and supposed antagonism of interests. Mr. Tremenheere says that the great Lanarkshire coal and ironmasters now see all this and deplore it. Such firms as the Messrs. Baird, the Messrs. Wilson, and others, are promising amendment, and intend, in all future erections of cottages, to provide the miners with the means of preserving and attaining the common decencies of life. Unfortunately, the "Union" of the colliers is strongest around Glasgow; and this retards the development of the mutual good feeling. Masters who find themselves in the power of their men, and these men not the most competent judges of what is best, even for their own ultimate interest, are slow in contracting that spirit of wise benevolence, which pauses, in its pursuit of profit, to provide for the social, moral, and physical welfare of the workpeople. Mr. Tremenheere enters into copious details, in order to show the injurious effect of the "Union" on the demand for the labour of the workmen themselves. At once to raise wages and to shorten the hours of labour will, in the first instance, compel the master to remunerate himself from the consumer. But competition enables the consumer to drive the master back to his profits, and if he does not or cannot submit to a reduction, he is driven out of the market. All this, which Mr. Tremenheere illustrates by striking examples, is plain to men of ordinary education and common sense; but it is beyond the reach of an untaught, and, too frequently, an unreasoning collier. And there is great excuse for him. He earns full wages at seventeen; he works in danger and in darkness; he feels himself getting old from thirty-five; from forty-five to fifty he ranks as an aged, and, frequently, is a disabled man. The collier looks only to the profit of the master, which he thinks can afford a little paring down in order to afford an increase of wages and shorter hours of labour. Or if the profit cannot stand it, the consumer will. We deplore the error of the collier, for his own sake; but the doctrines taught and enforced by the Lanarkshire Union are but another form of those, which, in 1841, carried a general election, routed a ministry, were advocated by the noble and the wealthy, and were supposed to constitute the stem and branches of the British constitution. In contrast with the general condition of the collier community throughout Britain, there are some remarkable instances where care and kindness have evinced what may be done. One of these is a happy collier community of about 120 families, connected with a coal-pit a mile and a half from Kilmarnock, and which is the property of the Duke of Portland. The picture drawn of this community by Mr. Tremenheere is as interesting as it is beautiful, and shows what may be effected if we only set about it in the right way. The people are comfortable, cleanly, industrious, temperate, and religious; the children, unlike those of other districts, surrender their earnings to their parents up to the time of marriage, and are thus preserved from vices which abound amongst the youth elsewhere; there are schools, libraries, benefit and saving societies, and a very considerable proportion of the youth have struggled upwards into other professions, sacred and civil. Other districts present similar examples. At Flockton, near Huddersfield, where the resident proprietor, Mr. Stanfield, devotes his mind to the welfare of his workpeople; at Earl Fitzwilliam's collieries, near Wentworth and Rotherham; at the Waterloo Colliery, near Leeds; and other places, there are abundant proofs of what may be accomplished when benevolent proprietors and agents untiringly and intelligently exert themselves, undiscouraged by occasional temporary instances of ingratitude. If further evidence were required, we may point to the Low Moor Iron Company's collieries, near Bradford, at which a most rapid progress has been made in educating the youth employed. Four

years ago only two in ten could read, out of 1100 employed; now, out of 494 boys, between ten and eighteen, at work, there are 411, or 83 per cent., who can read. Altogether, the report of Mr. Tremenheere affords sufficient encouragement to induce us to persevere in the firm conviction that ere long we shall succeed in Ammanising even colliers.

Original Correspondence.

THE ELECTRIC GUN.

SIR.—The allusion to the "electric gun" reminds me of views I have long entertained respecting the all but universal application of this subtle and powerful, yet easily managed and controlled, agent. Its substitution for the match in firing cannon, above all, in the case of firing signals of distress, when, by reason of the waves breaking over the ship, the former may not be available, is so obvious, that any comment were superfluous; the rupture of rocks, too, by inflammable vapours mingled with air, and exploded by its agency: all these, and many more, emphatically proclaim the potency of its spell. That the simultaneous and instantaneous ignition of our gas lamps in cities and towns, will, ere long, be substituted for the present slow and irregular method, as I have so long pointed out, it requires no seer to foretell, and its ultimate application to projectiles from the expansion produced by its agency, is as sufficiently apparent. I confess, however, that I am astonished it has never been enlisted into the service of the steam-engine, when every sound reflecting mind, and clear intellect, must readily perceive that it must ultimately do away with the present employment of fuel and boilers, and their auxiliaries. I have no pretensions to the vision of the prophetic vista, when I venture to predict that the time is not far distant when the globe will be circumnavigated by the agency of electricity. In my work on atmospheric electricity, on the question of paragnes, I have stated that the influence of climate may even be modified by it. The production of ice for dietetic and medical purposes, may be also, no doubt, effected by means of electricity in the intense cold consequent on the expansion produced by it. J. MURRAY.

Portland-place, Hull, Sept. 4.

IRON HOUSES, &c.

SIR.—The universal application of iron for warehouses, dwellings, sailing-vessels, and steamers, &c., naturally elicit a very curious and important inquiry. Their influence in reference to lightning or atmospheric electricity, involves, as a matter of course, their salubrity, as far as human health is implicated. Besides, the material is not only a conductor in its relations to atmospheric electricity, but temperature. To be insulated or encased by non-conducting materials, places us in a very different position compared with its direct antagonism. It is true iron is among the worst conductors, both of heat and electricity. The dampness or humidity of the included atmosphere will be materially modified by a metallic shrine; of course, an iron wall will be always damp. Iron walls in contact with the earth will have a direct and immediate influence in relation to ascending electricity, as well as terrestrial heat. What may be their influence in countries convulsed by earthquakes it is difficult to divine. It is singular that the iron steamers on the coast of Africa escaped, while others were struck, and this I have elsewhere ventured to explain. Iron bridges have escaped, while vessels in juxtaposition have been struck; iron foundries and forges, iron yards, &c., generally escape, but instances have occurred both in this country and America, where the latter have been struck by lightning, and considerable damage occasioned. I confess I should not like to pitch my tent near an iron walled house, without the protection afforded by lightning conductors. I merely throw out these general remarks, as suggesting topics of reflection for the electrician.

Hull, Sept. 4.

[What would our respected correspondent say if the "iron wall" were galvanised?]

THE TOBACCO PIPE.

SIR.—I have lately repeatedly seen in this country *meerchaum pipes* blazoned forth for sale in cigar-shops. The *meerchaum*, or *ecume de mer*, belongs to that class of minerals which includes the "sophistic," mica, talc, lapis olaris, asbestos, amianthus, &c., and the characteristic constituent of which is *magnesia*. I cannot immediately perceive that there is any deleterious ingredient in *meerchaum*, but German medical men have pronounced an opinion hostile to the use of *meerchaum pipes*, in consequence of their deleterious effects. I merely mention the circumstance, not being practically a judge in such matters, as I do not use tobacco in any shape or form—indeed, I consider it a most pernicious habit, but let every one be fully persuaded in his own mind." Certain it is, that among the tens of thousands of pipes, I have seen in active use on the continent, not one of these was of *meerchaum*. All those used in Germany have *porcelain* bowls, and often are prettily painted; many hundreds have I seen suspended in a single window both at Cologne and Coblenz, and have often stood and admired their elegant and tasteful paintings and decorations. An intelligent student of the University of Bonn informed me that sometimes the painting on the porcelain bowl of a single pipe has cost above twenty-six thalers—that is, 4*l.* sterling!—J. MURRAY: Portland-place, Hull, Sept. 3.

IRON PLATE "PUNCH."

SIR.—In reply to Dr. Murray, allow me to state that this is an age of re-invention, one-half of the world not knowing what the other half are about. The manner in which we have been used to punch plates for boilers or steam-engines in Cornwall is by means of a long lever, a fly-wheel, and a vertically revolving arm, with two rollers, one at each end, the weight of the lever raising the *punch*, which is again depressed, as one of the rollers rises in its revolution under the longer arm of the lever. That my plan has been tried and succeeded for twenty or thirty years in the north, is a proof of the utility of the invention, if also applied in the far west! Solomon said long ago, that "there's nothing new under the Sun." It's something to spread the knowledge of the unknown, and this, the inventor, "in arrear with Time," has done, and so has Dr. Murray, in his more splendid original communications on other matters—nothing that elicits a line from the Doctor is written in vain.—Penzance, Sept. 8. A. T. J. MARTIN.

[Mr. Martin is wrong in attributing the letter to Dr. Murray: on again referring, he will find it emanated from our correspondent, "Ferrum."]

MECHANICAL CERTAINTY OF RAILWAYS—RUNNING OFF.

SIR.—Mr. Martin's remarks in your Journal respecting trains running off the rails, I think would not prove a remedy, the central plate of one foot high would be liable to snap in case of much pressure, and would be very inconvenient on road crossings, &c. I would suggest the following remedy—the engines and carriages to be made with a double rim round the wheels, so as to fit the rail on both sides, and also a tube placed between the rails, and attached to the engine, similar to the atmospheric mode, but worked without the chemical preparation; I think the latter mode would have the desired effect. The above remarks in your Journal of next week, will oblige—JAMES SHEPHERD: Stockton, Sept. 3.

[Several methods have been suggested to prevent trains running off the rails; among them, one by Major Parbly, admirably calculated to effect the desired object, and has met the entire approval of General Pasley—the model of which can be inspected at our office; there is besides Prosser's guide wheel, expressly intended to meet the desideratum, and which is fully described in another column.]

SCIENTIFIC WORKING IN COLLIERIES.

SIR.—Dr. John Murray supposes that all the individuals who have lost their lives by fire-damp explosions, are so many lives sacrificed to the carelessness, recklessness, or greediness, of coal owners, and their managers of the mines, and he seems to think that the Government can (and hopes they will) enact laws to compel coal mines to be worked on scientific principles. Does Dr. Murray suppose that one scientific plan will be proper for all fiery collieries, dissimilar to each other? Let the Doctor know, that some collieries are so pestered with faults, and those faults so derange the regular workings, that no one system can be followed, while hundreds of schemes are adopted to overcome difficulties, which neither Dr. Murray, nor any other merely scientific man, knows anything about. I have no objection to any opinion of gentlemen, learned in science, but I know right well, that if the whole of them were consulted, and our law givers turned over to their assistance, without the aid of practical men, it would be all a farce, as was the Haswell Commission: and after all that could be, or can be, done, there will be fires in coal mines; but there might be means used to prevent such destruction of human life, from the after damp, as takes place in the north of England mines.—T. DEAKIN: Blaenavon, Sept. 8.

IRON FURNACES IN FRANCE.—In continuation of the notice in last week's *Mining Journal*, on the improvements making throughout France in the manufacture of iron, we continue the subject by departments.—Moselle.—At the works of Hayange three steam-engines have been erected, of the force of 110 horses power, for working the bellows and flattening machines. These engines are heated by gas from the high furnaces and puddling ovens. The fires of the affinage of these works are blown by heated air during the melting of the metal, and by cold air during what may be called the refining. At the works of Moyeuvre, Jamaires, Gouey, and Mutterhausen, the gas from the high furnaces and the refining fires is supplied by the furnaces of the steam-engines. Nord.—Three English forges have been constructed and are now at work at Crespin, Mauberge, and Haumont on the Sambre, the production of which will be very great. In these new works, like those of Ferrières, d'Anzin, and Denain, the steam-engines are heated by gas from the different reverberatory furnaces. Pas-de-Calais.—At the works of the Marquis Bourguignon the whole of the high furnaces are at work since 1844, and are remarkable for the tenacity of their metal. At the high furnace of Marquise coke and anthracite used to be consumed, but now they have greatly improved it, and the furnaces render a good metal. Rhin (Upper).—Here they have adopted the cold process of refining. Rhone.—At the works of Givors the gas from the high furnaces are equally applied to the heating of the apparatus from the fire of this high furnace, as to that of the steam-engine which works the bellows. In the works belonging to the mines of Chessey and St. Bel, the copper ores, which are to be melted by hand ovens, are roasted in closed vases, with a preparation of sulphuric acid; after which the pyrites roasted in sulphurates are transformed, leaving them exposed to the air, and washing them with water, containing a small quantity of sulphuric acid, they are then precipitated into a solution of copper in its metallic state by means of old iron—this process allows them to mix with advantage poor ores, that do not contain more than 1*l* per cent. of copper. Saône-et-Loire.—The works of Creusot have been greatly increased, a high furnace with a coke of fourteen metres in height has been erected, besides the four already existing, worked by heated air. It has been found, that by mixing a certain quantity of lime in the puddling furnaces there is a great benefit derived, which is done after the melting of the metal. The steam-engines, which work the bellows of the high furnaces of these works, are nearly all heated by the gas of the furnaces, and the steam-engines which propel the flattening and drawing are also heated, in a great measure, by the gas arising either from the puddling ovens, or the refinery by charcoal. The apparatus for compressing consists in a press, with a large hammer, and several vertical hammers. Several flattening machines have been constructed, which will be propelled by a cylindric and horizontal steam-engine, of 100-horse power. At the works of Verderat the furnaces that receive sheet and cast-iron for the making of tin, are only heated with gas from the refining fires in the Comtois system, which notwithstanding the economy, has the advantage of greatly improving the produce of the ovens.

CIVIL ENGINEERING ON THE CONTINENT.—England has ever been renowned for her civil engineers, from the time of Watt, her Telford, the Stephensons, the Rennies, Locke, Cubitts, and hundreds of others, have made her look upon by foreign nations as the great seat of invention and civil engineering. Not a railway is constructed either in France, Belgium, Germany, Russia, Spain, Portugal, Italy, the Americas, and the Indies (East and West), but an English civil engineer is consulted for plans and estimates, as all speculators, be of what nation they may, have more confidence in that profound judgment he evinces, to their own. Civil engineering has always been a study peculiar to this nation: being one of the most commercial powers, they have had to invent machinery for the extensive manufactory of cotton, woollen, &c., with which she abounds in Yorkshire and other parts; and for the working of her astounding iron and steel factories, her wealthy coal, iron, copper, lead, and tin mines; her vast and opulent steam navy, where, by the force of engines propelled by a power unknown generally half a century ago, they now cross the wide Atlantic, the Indian Seas, Mediterranean, Bay of Biscay, from the shores of Spain to the Baltic, with the same facility as formerly from London to Gravesend; her locomotives on railways: in fact, machinery is used in every branch for the welfare of the human race, but particularly our working and manufacturing classes, who formerly were in a state of an oppressive slavery, by toil, worse than ever were those of the West Indies. It is, therefore, to the civil engineer—to his inventive and enterprising mind—that mankind in general is indebted for the benefits they now daily experience from machinery and the working of our mineral resources of Cornwall, Wales, Staffordshire, and other counties, for wherever there is ore, the machine is in operation. It is our engineers that excited the stimulus and enterprise which is now developing itself, not only all over France and Belgium, but the whole continent of Europe, to the far distant climes of North and South America and India. The powers of Europe, involved as they had been for nearly half a century in most afflicting wars, either with the Emperor Napoleon, or the republican dynasty of Robespierre and his confederates, had but little time to devote to the advancement of science, excepting that of military tactics. Napoleon established the military schools, St. Cyr, Saumur, the Polytechnic, and others, but nothing but military engineering, the forming redoubts, batteries, &c., to the greatest advantage was then the study of the rising generation. The blessings of thirty years' peace has produced the greatest benefits to science and commerce all over the world; schools of civil engineering are being established in nearly every department throughout France, in Belgium, and the whole of the north of Europe; they are not only taught engineering in all its branches, but also mining operations, so as not only to be enabled to examine their mineral productions, but to work them. The progress of railways that is now making on the continent, has seriously occupied the attention of the different Governments to strongly encourage this branch of engineering science among the present youthful generation. The monopoly that has been practised for so many years over that particular study, has caused an emulation and jealousy to compete with us from one end of the continent to the other; and many of the railway companies are having their own locomotives made on their own establishments, as well as steam-engines for manufactory and vessels, sooner than come to England, although they are aware of their inferiority compared with those constructed by the English civil engineer.

THE EFFECTS OF SEA WATER ON IRON.—In the course of the late Government inquiry on establishment of harbours of refuge, Professor Faraday furnished some interesting particulars, respecting the effects of sea water on iron. His observations had unfortunately been rather limited, and confined to the question of cast-iron. Between this body and sea water he considers the action to be vigorous, and greatest in the water near the surface; less in deep water, and least of all when the iron is buried in sand or earth, or building materials (into which the water may penetrate), for then the oxide and other results formed are detained, more or less, and form sometimes a cement to the surrounding matter, and always a partial protection. Soft cast-iron corrodes more rapidly than hard cast, and than the brittle white iron. As to the amount of corrosion in any given time, Professor Faraday had not an opportunity of observing any good and satisfactory cases of illustration. In estuaries and the mouths of rivers, he considered it probable that great differences of corrosion would arise from the different circumstances of variable salinity; the soil of the river, if near a town, will much affect the metal; thus, a wharf of cast-iron might occasionally be greatly injured, by making fast to it vessels that are coppered, using iron cables. As to the protection of iron, with respect to the permanency of a coat of paint, or tar, or bituminous matter, the only experience the Professor had, was in a case where were coated iron, sheathed for vessels, was brought under his notice. He was then much impressed with the thorough adhesion of the coat to the iron. Zinced iron would resist the action of the sea water, as long as the metal would crust the surface, but zinc dissolves rapidly in sea water, and after it is gone, the iron would, of course, follow. As to voltaic protection, Professor Faraday considers that the cast-iron piles, proposed for light-houses or beacons, might be protected by zinc, in the manner proposed by Sir Humphry Davy, to protect copper by iron, but, even in that case, the corrosion of the zinc would be very rapid. If not found too expensive, the object would be to apply the zinc protectors in a place where they could be examined often, and replaced when rendered ineffective; in this manner, he entertains little doubt that iron could be protected in sea water. It is even probable that, by investigation and trial, different sorts of iron might easily be distinguished and prepared, one of which would protect the other: thus soft cast-iron would probably protect hard cast-iron, and then it would be easy to place the protecting masses where they could be removed when required. Hence, though iron be a body very subject to the action of sea water, Professor Faraday considers not unlikely that it might be used with advantage in marine constructions, intended to be permanent, especially if the joint effects of preserving coats of voltaic protectors were applied.

WARWICK AND WORCESTER RAILWAY.
(Provisionally Registered under 7th and 8th Vic., c. 110.)
Capital £700,000, in 35,000 shares of £20 each.—Deposit £2 2s. per share.

No shareholder to be liable beyond the amount of his subscription.

PROVISIONAL COMMITTEE.

The Right Hon. Lord Leigh, Stoneleigh Abbey, Warwickshire.

Sir Francis Shuckburgh, Bart. Shuckburgh Park, Warwickshire.

Sir William Wynn, Maseynewadd, chairman of the North Wales Railway.

Sir Henry Winston Barron, Bart. M.P. director of the Waterford and Kilkenny Railway.

Sir William Bacon Johnstone, Bart. Hilton, Aberdeenshire, director of the Chepstow and Forest of Dean Railway.

Sir John E. de Beauvoir, Bart. chairman of the London and Birmingham Extension Railway.

Sir George William Prescott, Bart. director of the Chester and Manchester Railway.

Sir William Lloyd, Bart. Bryn-Estyn, near Wrexham, director of the Trent Valley Continuation Railway.

Sir Samuel Brown, R.N. director of the Dieppe and Paris Railway.

Sir John Hare, F.S.A. Langham-place, director of the London and Manchester Railway.

William Bulkeley Hughes, Esq. M.P. chairman of the Welsh Midland, and director of the Leicester and Bedford Railway.

Abraham Alexander, Esq. Lullingstone House, Warwick.

John Anderson, Esq. E.I.C.S. Euston-place, Euston-square.

William Fecayan Black, Esq. Wilton-place, Belgrave-square, director of the Italian and Austrian, and London and Birmingham Extension Railways.

Joseph Brown, Esq. London, director of the Oxford, Gosport, and Southampton, and Manchester and Birmingham Continuation Railways.

John Burgess, Esq. Boroughreeve, Manchester, director of the Nottingham and Boston Railway.

Capt. Bradley, jun., Esq. Birmingham, director of the Manchester and Birmingham Continuation.

Major Chase, Nottingham-place, London, director of the Madras Railway Company.

Henry Chaytor, Esq. Clervaux Castle, Darlington.

Richard Carpenter, Esq. magistrate of the county of Middlesex, and deputy-chairman of the London and Birmingham Extension Railway.

Charles Collins, Esq. John-street, Adelphi, London.

Col. Robert Douglas, Royal Artillery, United Service Club, director of the Bideford and Tavistock Railway.

Peter Henry Edlin, Esq. Brick-court, Temple, London, director of the London and Birmingham Extension Railway.

Col. Fitch, York-terrace, Regent's-park, director of the South Midlands Railway.

Capt. William Ford, Royal Marines, Leamington.

John Grant, Esq. Northampton, director of the London and Birmingham Extension.

John Gay, Esq. South-street, Finsbury, London, director of the London and Birmingham Extension Railway.

Giles Hall, Esq. Burton-on-the-Water, Gloucestershire.

Richard Harris, Esq. Kilsingbury, Northampton.

Lewis Harrison, Esq. Daventry.

James Headly, Esq. Market-hill, Cambridge.

James Hitchins, Esq. coroner for the city and county of Lincoln.

The Mayor of Worcester.

Lewis Levy, Esq. Tavistock-square, London.

Jonathan Hopkins, Esq. Chester-square, London, director of the Liverpool and Ormskirk Railway.

John Howell, Esq. St. George's-terrace, Hyde-park, director of the Liverpool and Ormskirk Railway.

I. Douglas Hopkins, Esq. Bedford-square, London, director of the London and Birmingham Extension Railway.

Sam. Hayes, Esq. Birmingham, director of the Leicester & Birmingham Railway.

Roger Holinsworth, Esq. Birmingham, director of the Trent Valley Continuation Railway.

Frederick Jones, Esq. Lincoln's Inn, London, director of the London and Birmingham Extension Railway.

Thomas Kelly, Esq. Alderman of the City of London.

George Lawton, Esq. George-st. Hanover-sq. director of the South Midland R.Y.

Thomas Lee, Esq. Daventry.

William Linnell, Esq. Flore, Northamptonshire.

T. Linnell, Esq. Northampton, director of the London and Birmingham Extension Railway.

John Manning, Esq. Harpole, Northampton.

John Manning, Esq. Kilsingbury, Northampton.

John Marshall, Esq. Magistrate, Northampton.

John Mollat, Esq. Marple House, Warwick, director of the London and Birmingham Extension Railway.

Peter Morrison, Esq. managing director of the Britania Insurance Company.

George Nelson, Esq. Hill House, Warwick.

George Parbury, Esq. Russell-square, director of the East and West of England Junction and Trent Valley Continuation Railways.

William S. Potter, Esq. Sussex-gardens, Hyde-park, director of the South and Midland Junction Railway.

Henry James Parsons, Esq. Warwick.

Richard Cowley Pophill, Esq. Brompton, Middlesex.

John Reddall, Esq. Dallington Hall, Northampton.

James Russell, Esq. Gloucester-place, Portman-square, London.

William Shaw, Esq. managing director of the Farmers' and General Fire and Life Insurance Institution, & director of the London and Birmingham Extension R.Y.

Thomas Shaw, Esq. Northampton.

Henry Lewis Smale, Esq. Willoughby-house, Tottesham, director of the London and Dover Railway.

John Snelling, Esq. Upton Hall, Northampton.

Charles Spicer, Esq. F.R.S. Portman-square, director of the Armagh and Coleraine Railway, &c.

Richard Tibbitt, Esq. Leamington.

Joseph Thomson, Esq. director of the London and Brighton Railway.

Thomas Hammond Tooke, Esq. director of the London and Birmingham Extension Railway.

Joseph Underwood, Esq. the Park, Blackheath.

Frederick Foveaux Weiss, Esq. Chester-terrace, Regent's-park, London, director of the London and Birmingham Extension Railway.

Captain Frederick Bayley Wardrobe, Brompton Crescent, Brompton, director of the London and Windsor Railway.

Joseph Willcox, Esq. Warwick.

John Edward Wilson, Esq. Grove Hall, Market Drayton, director of the Trent Valley Continuation Railway.

William Wilson, Esq. M.D. Devonport-street, Sussex-square, Hyde-park.

The names of a very influential Local Committee, already formed in Worcester, will shortly be added to the above list.

BANKERS.

London—The Commercial Bank, Lothbury.

Northampton—The Northampton Union Bank, Samuel Percival, Esq. manager.

Daventry—Branch of the Northamptonshire Union Bank.

Warwick—The Warwick and Leamington Banking Company.

Standing Counsel—Frederick James Hall, Esq.

Consulting Engineers—Sir John Macneill, LL.D. F.R.S., and James Thomson, F.R.S.E. M.R.I.A.

Engineers—William B. Prichard, Esq. C.E. F.A.S.

SOLICITORS.

Messrs. Wright and Hanbury, 11, Finsbury-place South, London.

Messrs. Bedford and Pidcock, Worcester.

Thomas Cave Hall, Esq. Northampton.

This direct communication between the populous towns of Warwick and Worcester will complete the great chain of railways from Boston, Peterborough, and Northampton, to the grand focus of western railways—the city of Worcester. The Warwick and Worcester Railway will not be in competition with any existing lines; on the contrary, it will very materially aid the railways already established for the accommodation of these cities. To the proposed Oxford and Birmingham Junction Railway, it must prove an important auxiliary; and by means of the London and Birmingham Extension Railway, it will open up to Worcester the most direct intercourse with Leamington, Northampton, Peterborough, and the eastern counties—while to Warwick and its rich and populous neighbourhood, it will afford the most convenient access, not only to Worcester, but to Shrewsbury, Hereford, Monmouth, and the great manufacturing towns in the north-west and south of England, in course of connection by the Oxford, Worcester, and Wolverhampton Railway, and the several projects for the accommodation of North and South Wales.

By means of the proposed extension of the Oxford, Worcester, and Wolverhampton Railway to Porthtynllaen, in Carnarvonshire—to carry out which, that company is pledged for the full completion of its important scheme—the Warwick and Worcester Railway will confer another important boon on all the towns connected with its termini by the great chain of railways running eastward. In connection with the London and Birmingham Extension Railway, it will give to the eastern counties, to the populous towns of Northampton, Peterborough, Bedford, Cambridge, &c., the most direct means of communication with Dublin, and the ports on the eastern coast of Ireland. To the numerous visitors annually attracted to Leamington from the north and south of Ireland, as well as from central Wales, the Warwick and Worcester Railway must, at the same time, prove of the highest utility. It may also be expected that the amount of passenger traffic from the manufacturing-town of Worcester and its vicinity, which the projected line will unquestionably draw to that fashionable watering-place, will be a source of very considerable income.

The line has been carefully surveyed by the company's engineer, whose report is highly satisfactory as to the possibility of avoiding all unfavourable gradients and interference with ornamental property, without any material sacrifice of directness of route.

The Warwick and Worcester Railway will commence at Warwick, at the united stations of the London and Birmingham Extension Railway, and the Birmingham and Oxford Junction Railways, and thence proceed, via Aylesbury, to Worcester, there to unite with the Oxford, Worcester, and Wolverhampton Railway. A branch will be made to Droitwich.

In the allotment of share, local and landed interests will of course receive the consideration to which their importance entitles them. Powers will be applied for in the bill to allow interest at the rate of 4 per cent. per annum on all deposits and calls from the time of payment until the completion of the line.

Applications for shares, plans, prospectuses, and detailed information, may be made at the offices, No. 15, Old Jewry-chambers, London; and at the office of the company's solicitors, Messrs. Wright and Hanbury, 11, Finsbury-place,

South, London, of the local agents:—Messrs. Bedford and Pidcock, Worcester; Thomas Cave Hall, Esq., Northampton; Thomas Orton Gery, Esq. Daventry; and Robert Tibbitts, Esq. Warwick; and at the offices of the following stock and sharebrokers:—Mr. Hanbury, 4, Angel-court, Throgmorton-street, London; Messrs. Barnard's-buildings, Liverpool; Messrs. Collinson and Flint, Hull; Messrs. Hicks and Co., Alfred-street, Bow-lane, Leeds; Messrs. Hugh, Munro, and Co., Edinburgh; Mr. William Bolton, Stratford-upon-Avon; Mr. Thomas Sandford, Exeter; Messrs. Hepwood and Palmer, Plymouth; Mr. John Wright, Union-passage, Birmingham; Mr. T. W. Powell, 2, Wellington-street, Leamington; and Mr. I. N. Balme, Gloucester.

line will also form the nearest route from Derby and the north to Birmingham. The capital proposed to be raised is £300,000, in 15,000 shares of £20 each. A deposit of £2 2s. per share will be required to be paid upon the allotment to the credit of the directors with the bankers of the company.

No call will be made until the Act of Parliament shall be obtained, and power will be taken in the Act to allow interest at £4 per cent. per annum, upon the amount of each call, from the date of payment until the opening of the line, and subscribers will not be answerable beyond the amount of their shares. The Subscribers' Agreement and Parliamentary Contract, which shall contain a clause empowering the directors to amalgamate with any other railway now formed, or to be formed, to extend or make branch lines, or transfer, mortgage, or dispose of the present undertaking for the benefit of the company, as they may deem proper, will be ready on the day fixed for the payment of deposit, and will be required to be executed when the bankers' receipts are exchanged for certificates of scrip; and the shares of any subscribers making default in the execution of those deeds within the time limited, of which fourteen days' notice will be given, will be absolutely forfeited.

No application for shares can be attended to, unless accompanied by a reference to a member of the provisional committee, one of the solicitors, agents, or a banker.

Forms of applications for shares, copies of the prospectus, and a map of the line, may be obtained at the temporary offices of the company, 60, Moorgate-street, London; from the solicitors; from the local agents; from Mr. B. B. Williams, 17, Throgmorton-street, London; Mr. A. Sym, 9, Tokenhouse-yard, London; Mr. W. H. Collis, 104, New-street, Birmingham; Messrs. Ludlow Brothers, and Messrs. Pownall and Worthington, Liverpool; Mr. John Barlow, Manchester; Messrs. Robinson and Furlay, Leeds; Mr. Thomas Evans, 15, Old Jewry Chambers, London; Messrs. Ellgood and Harrison, Leicester.

BIRMINGHAM AND LICHFIELD RAILWAY.

FORM OF APPLICATION FOR SHARES.

To the Provisional Committee of the Warwick and Worcester Railway.

Gentlemen.—I request you will allot me shares of £30 each in the above-named company, and I hereby undertake to accept the same, or such less number that may be allotted to me, to pay the deposit of £2 2s. per share thereon, and to sign the subscribers' agreement and Parliamentary contract when required.

Dated this day of 1845.

Name in full
Profession or Business
Residence, Private and Professional
Reference
15, Old Jewry Chambers, London.

WRIGHT AND HANBURY.

WARWICK AND WORCESTER RAILWAY.—In consequence of the numerous applications for shares in this company, the provisional committee hereby give notice, that NO APPLICATIONS FOR SHARES will be received after MONDAY, the 15th inst., except from parties locally interested, whose applications will be received until the 18th inst.

By order of the committee,

WRIGHT AND HANBURY.

SHEFFIELD, NOTTINGHAM, AND LONDON DIRECT RAILWAY.

This line will commence at Sheffield, and proceed through Nottingham to Kettering, where it will fall into the London and Manchester Direct Railway.

It cannot fail to be matter of surprise that the large and important manufacturing town of Nottingham should so long have remained unaccommodated with a more direct and independent line of railway to London than the existing circuitous route, and that, too, made up of several sections. This surprise increases upon observing that a direct line through Nottingham presents also a much shorter and a more direct and independent course from London to the great trading mart of Sheffield, and, consequently, to Leeds also, and all the intervening district, embracing the eminently manufacturing towns of Rotherham, Barnsley, Huddersfield, Wakefield, Pontefract, Halifax, and Bradford.

The present project is undertaken to supply this required desideratum, and it will at the same time afford immediate railway communication with the important towns of Chesterfield, Mansfield, Melton Mowbray, Uppingham, and Rockingham, which towns now seriously feel the want of such accommodation.

The most laboured detail of description as to the amount of traffic and profit which this railway is likely to command would fall very short of the estimate which every intelligent person is likely to form for himself when he considers the rich, populous, industrial, and enterprising districts through which this railway will pass, and the density of commercial and manufacturing interests immediately upon its terminus at Sheffield, and in the crowded district between Sheffield and Leeds. Every arrangement will be made for application to Parliament in the ensuing session.

Full prospectuses, with the names of a powerful and influential committee, will be ready in the early part of next week.

Applications for shares, in the usual form, to be made to the solicitors—John Owens, Esq., 35, Moorgate-street; A. W. Arnold, Esq., 31, Golden-square, and William Rogers, Esq., Bedford, and to the following sharebrokers:—Messrs. Preece and Evans, 39, Lothbury; Mr. Miles, Worcester; Mr. Thomas Henry Wheeler, Worcester; Messrs. Townley and Whitehead, Liverpool; Mr. Morris Reynolds, Liverpool; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. Frederick Stamp, Hull; Mr. Thomas Boardman, Blackburn; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Mr. Thomas Sandford, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Exeter; Mr. J. S. Holland, Coventry; Messrs. Houghland and Leese, Manchester; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Bristol; Mr. J. S. Holland, Coventry; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Bristol; Mr. J. S. Holland, Coventry; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Bristol; Mr. J. S. Holland, Coventry; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Bristol; Mr. J. S. Holland, Coventry; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Bristol; Mr. J. S. Holland, Coventry; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Bristol; Mr. J. S. Holland, Coventry; Mr. Richard E. Hine, MacCleod; Mr. James Jamieson, Leeds; Messrs. Wellbeloved and Oastler, Leeds; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eye and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stokes, Cheltenham; Mr. Joseph Clarke, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr

proposed railway, and I undertake to pay the deposit of £3 12s. 6d. per share thereon, or on any less number you may appropriate to me, and to execute the subscribers' agreement and Parliamentary contract when required.—Dated this day of 1845.

Name Trade or profession
Residence Reference

DIRECT EAST AND WEST JUNCTION RAILWAY,
commencing at Kidderminster and ending at Hereford.
(Provisionally Registered.)

Capital, £800,000, in 40,000 shares of £20 each. Deposit, £2 2s. per share.
At a Meeting of gentlemen interested in the above line, held at 35, Moorgate-street, London, on Tuesday, Sept. 9, Sir WILLIAM WYNNE in the chair.

It was proposed by Major Croft, and seconded by A. M. M'ORAN, Esq.; and unanimously agreed to,

That the project of forming the Direct East and West Junction Railway, commencing at Kidderminster and ending at Hereford, be adopted by this meeting, and that a company be now formed for carrying it into execution.

Proposed by Richard William Johnson, esq. and seconded by Major Waller.

That the acting committee of directors consist of the following gentlemen, with power to add to their number:

Wynn, Sir William, Suffolk-street, Pall-mall, chairman of the North Wales Railway

Prescott, Sir George, William, Bart., Theobalds, director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway

Stanhope, Colonel, the Honourable Leicester, Ashburnham House, London, chairman of Remington's London and Manchester Railway

Barker, Captain, Regent-street

Croft, Major J. T., Regent-street, Piccadilly, deputy-chairman of the Chester and Manchester Railway

Cumberlege, Nathaniel, esq. York-terrace, Regent's-park

Elrington, Lieut.-Colonel, Fusiliers Guards, 12, Wyndham-place, director of the Leeds and Liverpool Railway

Gutch, John Matthew, esq. banker, Worcester, director of Remington's London and Manchester Railway, &c.

Hughes, Alderman W. Hughes, director of the London and Greenwich Railway

Johnson, Richard William, esq. Moorgate, director of Remington's London and Manchester Railway

Pulteney, Captain Douglas Kinnaird, Parliament-street, London, director of the Nottingham and Boston Railway

Johnston, D. T. Esq. Alderman Charchyard, London, director of Remington's London and Manchester Railway, &c.

Keene, John Joseph, esq. St. John's Wood, London, director of National Bank of Ireland

Metzger, Horace William, esq. B.C.L. London, director of Remington's London and Manchester Railway, &c.

Macmoran, A. M. Esq. 58, Cambridge-street, Hyde-park

Stevenson, Thomas, esq. director of the Agriculturalist Cattle Insurance Company

Waller, Major James, K.H. St. James's-square, director of Remington's London and Manchester Railway Company

Proposed by E. J. Spiers, Esq. seconded by George Tyler, Esq.

That John Owens, Esq. 35, Moorgate-street, and Joseph Alexander James Macgregor, Esq. 26, Suffolk-street, Pall-mall, London, be solicitors to the company.

Proposed by D. T. Johnson, Esq. seconded by Major Croft.

That George Remington, Esq. be the company's engineer.

The thanks of the meeting were then unanimously voted to the chairman, and the meeting separated.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Twelve o'clock.

Bank Stock, Shut	Russian, 5 per Cents, 115
3 per Cent. Reduced Ann., Shut	Spanish, 5 per Cents, 27 $\frac{1}{2}$
Consols for Account, 98 $\frac{1}{2}$	ditto, 3 per Cents, 38 $\frac{1}{2}$
Exchequer Bills, 48 pm.	Brazil, 5 per Cents, 86 4
Belgian, 4 per Cents, 100 $\frac{1}{2}$	Chili, 6 per Cents, 101 $\frac{1}{2}$
Danish, 3 per Cents, 99 $\frac{1}{2}$	Colombia, 6 per Cents, 18 $\frac{1}{2}$
Dutch, 4 per Cents, 99 $\frac{1}{2}$	Mexican, 5 per Cents, 32 $\frac{1}{2}$
Portuguese, Conv., 6 per Cents, 63 $\frac{1}{2}$	Peru, 6 per Cents, 39 $\frac{1}{2}$

SHARE MARKET.

MINES.—The principal feature of any consequence in the mining world, during the week, is the arrival of the packet with advices from the mines of Mexico; it will be seen that the Bolanos Mining Company have secured a patent in Mexico, for the reduction of silver ores without the use of mercury, and which plan, having been for some months undergoing the most searching investigations, is pronounced to be completely successful. Should such be the case, and the use of quicksilver, which has hitherto been the great drawback on the profits of the Mexican mines, be dispensed with, a complete revolution will be effected in their operations and their value; numerous mines, which have been partially worked, but closed from the impossibility of meeting the enormous cost of amalgamation by torta—the ancient system, which, we believe, has scarcely been improved upon for ages—will be re-opened and worked at a profit, and many localities, known to be rich in mineral, will be explored by parties anxious for mining speculation, and thus a new impetus will be given, and a wide field open, for rousing a spirit of research and mining enterprise, which has almost become dormant. The reports from Bolanos, Real del Monte, and the United Mexican Mines will be read with interest. In another column will be found a report of the meeting of the shareholders in the Cornubian Mining Company, to which we direct attention, as also to some remarks thereon, in another part of the Journal. Transactions in shares have been very limited, and we refer to our usual list of quotations.

RAILWAYS.—A great deal of business has been done since Monday in railway shares, and prices, on the whole, have been firm and steady, as the transactions that have been entered into are bona fide, and not what it was a few months back—the consequence is that the market is assuming a more stable and secure appearance; the mania is certainly abating, although several new schemes are brought forward for next session, and some are inclined to swallow the bait. The principal amount of the purchases have been in the scrips for the new lines. London and York have had a tendency to a rise; the Direct Northern, and Cambridge and Lincoln, are firm, doubtless the result of the meeting of shareholders, a report of which will be found in another column; South Midland, 7 premium. Of the established lines, Great Westerns have been rather down, having in the former part of the week been done at 85 to 90 pm., and are now quoted 80 to 85 pm.; London and Birmingham stock from 220 to 224, are done at 218 to 223; the Midland from 171 to 168, but these are no great criterion of the generality of other lines, as the market on the whole is steady. There has also been a good deal of business in the discount market this week, and it has been a great accommodation to many of the large speculators in railway shares and scrip, that the Bank of England has not made any rise, as was anticipated by many, for it still remains at 2 $\frac{1}{2}$ to 3, as last week, and sums to nearly any amount may be had at that discount. The following are the official returns of dividends of several of the railways, declared at their last meetings. The Manchester and Leeds Railway pays a dividend of 2 $\frac{1}{2}$ 18s. on the 100s. shares, of 1 $\frac{1}{2}$ 5s. 4d. on the 50s. shares, and of 2s. per share on quarter shares, all subject to the income tax; this leaves a reserved fund of £6,423L 10s. 5d., including the balance of the depreciation fund. Although a reduction in fares has been adopted, an increase in revenue, derived from traffic, to the amount of £23,892L 12s. 9d., is noticed compared with the same period last year. The net profit of the year's business has been 204,815L 19s. 6d.; the balance of the half-year's accounts applicable to a dividend was 67,901L 8s. 9d. Power has been given to the directors to raise further capital, divided into 103,365 shares, of 20s. each. The Manchester and Birmingham Railway pays a dividend at the rate of 6 per cent. free of income tax. The income of traffic for the last half-year shows an increase of 13,606L 12s. 7d. over the corresponding period of last year. The surplus remaining for division was 30,518L, which, with the amount claimed from the London and Birmingham for amalgamation, paid the dividend already mentioned. The West London Railway has also amalgamated with the London and Birmingham Company, and the whole of the liabilities of that unfortunate concern will now be liquidated. The following is the increase in the undermentioned railways for the ninth week of this half-year as compared with the corresponding period of 1844:

Eastern Counties	£ 8712	London and South-Western	£ 3,635
Edinburgh and Glasgow	4500	Manchester, Bolton, and Bury	647
Glasgow and Greenock	1869	Manchester and Leeds	6689
Glasgow, Paisley, and Ayr	2628	Midland Company	2317
Grand Junction	25964	Newcastle and Carlisle	454
Great Western	11126	North Union	1766
London and Birmingham	19320	Sheffield and Manchester	497
London and Brighton	8492	South Eastern	2178
London and Croydon	2120		

* Including Liverpool and Manchester. † Including Bristol and Birmingham.

JOINT-STOCK BANKS.—National Provincial of England, 28 $\frac{1}{2}$; National of Ireland, 48 $\frac{1}{2}$; London and Westminster, 27 $\frac{1}{2}$; Provincial of Ireland, 48 $\frac{1}{2}$.

MESSRS. LAMOND'S SALES.—The sale of mine shares by auction appears to be gradually on the decline—only twelve lots were offered last Tuesday, for which, we are informed by Messrs. Lamond, the following prices were obtained—viz., Harrowbarrow Old Mine, 1 $\frac{1}{2}$ L; Tamar, 9 $\frac{1}{2}$ L; Tincroft, 16 $\frac{1}{2}$ L; Cobrie 16 $\frac{1}{2}$ L; Royal Santiago, 21 $\frac{1}{2}$ L; Callington, 28 $\frac{1}{2}$ L; Wheat Concord, 6L; Lamerhoo Wheal Maria, 2 $\frac{1}{2}$ L; Crease, 4L; West Holmwood, 2 $\frac{1}{2}$ L; South Holmwood, 100—Total, 2964 tons.

Copper ores for sale on Thursday week, at Pearce's Hotel, Truro.—Mines and Parcels—United Mines 915—Tresavean 794—Consolidated Mines 788—South Caradon 348—Pewsey Consols 322—Trehetheran 768—Perran St. George 234—Hallenbeagle 214—Lanivet Consols 212—Graham and St. Anlyn 191—Treleigh Consols 147—Wheat Busy 110—Wheat Ellen 105—Wheat Anna 70—Williams's East Downs 37—Wheat Henry 19—Marin's gre 14—Total, 4788 tons.

and Lincoln (1 $\frac{1}{2}$ L), 4 $\frac{1}{2}$ L; Belfast and County Down (2 $\frac{1}{2}$ L), 8 $\frac{1}{2}$ L; London, Hounslow, and Western (2L), 2 $\frac{1}{2}$ L; Worcester, Shrewsbury, and Crewe (1 $\frac{1}{2}$ L), 4 $\frac{1}{2}$ L; Oxford, Worcester, and Wolverhampton (2 $\frac{1}{2}$ L), 10 $\frac{1}{2}$ L; North Kent (2 $\frac{1}{2}$ L), 4 $\frac{1}{2}$ L; Great North of France—Pepin-Lehalleur's (4L), 5L; ditto—Lebeuf's (2L), 8L; Royal North of Spain (2L), 2 $\frac{1}{2}$ L; Great Eastern and Western (2 $\frac{1}{2}$ L), 3L; Great North of Spain (2L), 2 $\frac{1}{2}$ L; Paris and Lyons—Calon's (2L), 2 $\frac{1}{2}$ L; ditto, Lafittes (2L), 2 $\frac{1}{2}$ L; St. Lawrence and Atlantic (4L), 4 $\frac{1}{2}$ L; Paris and Rouen (20L), 43 $\frac{1}{2}$ L; Lynn and Ely (2L), 7 $\frac{1}{2}$ L; London and York (2L), 7 $\frac{1}{2}$ L; Namur and Liege (4L), 6 $\frac{1}{2}$ L; Lynn and Dereham (1 $\frac{1}{2}$ L), 4 $\frac{1}{2}$ L; Somersetshire Midland (2L), 3L; London and Blackwall (1 $\frac{1}{2}$ L), 4 $\frac{1}{2}$ L; Miscellaneous.—Union Bank of Australia, 25L; Shipowners' Towing Company, 6L; Van Dieman's Land Company, 16 $\frac{1}{2}$ L; North and South Wales Bank, 9 $\frac{1}{2}$ L.

FRIDAY.—Cambridge and Lincoln (1 $\frac{1}{2}$ L), 4 $\frac{1}{2}$ L; North Devon (2L), 4 $\frac{1}{2}$ L; Grand Union (1L, 7s. 6d.), 2 $\frac{1}{2}$ L; North Kent (2L), 4 $\frac{1}{2}$ L; Great Grimsby and Sheffield (2 $\frac{1}{2}$ L), 16L, 7s. 6d.; Great North of France—Lafitte's (4L), 7L; Tean and Dove Valley (1L, 7s. 6d.), 3L; Louvain and Jemeppe (4L), 5L; Nottingham and Boston (1L, 7s. 6d.), 3L; Irish North Midland (2L, 12s. 6d.), 3L; Boston, Stamford, and Birmingham (22s.), 2 $\frac{1}{2}$ L; Irish North Midland (1L, 7s. 6d.), 1 $\frac{1}{2}$ L; Northampton, Banbury, and Cheltenham (2L), 6L; Lynn and Ely (2L), 7 $\frac{1}{2}$ L; East Lincolnshire (1L), 5L; Great Western (80L), 165L; Dendre Valley (2L), 2 $\frac{1}{2}$ L; Cambridge and Lincoln (2L), 4 $\frac{1}{2}$ L; Goole, Doncaster, Manchester, and Sheffield (1L, 7s. 6d.), 3L; Shrewsbury, Hereford, and North Wales (2L), 4 $\frac{1}{2}$ L; Great Western of Bengal (4L), 10s.; Dublin, Belfast, and Coleraine (2L), 3L; Whitehaven and Furness (1L), 9 $\frac{1}{2}$ L.

General Steam Navigation Co.—Forty-six 15L shares (14L pd.) were sold by Mr. Fuller, at the Mart, for 27L each;—also by the same auctioneer, **City of London & Tower Hamlets Cemetery.**—Twenty-five 10L shares, at 7L each. **Herne Bay Steam-Packet Co.**—Seventy 10L shares (all paid), at 14L each. **Herne Bay Pier Co.**—Thirty-five 50L shares (all paid), at 8 $\frac{1}{2}$ L each. **Herne Bay Gas-Light and Coke Co.**—Forty-three 25L shares, at 5L each. **London and Richmond Steam Co.**—33 10L shares (1L pd.), at 2 $\frac{1}{2}$ L each. **Waterman's Steam-Boats Co.**—165 2 $\frac{1}{2}$ L shares (all paid), 1 $\frac{1}{2}$ L each.

LEEDS, THURSDAY.—We have no change of any importance to notice in the general character of our market, which continues dull, and prices generally are without improvement. The Manchester and Birmingham meeting resulted in the repudiation of the amalgamation with the London and Birmingham, by the votes of an immense majority of the shareholders; the shares run up, on this being made known, to 80L per share, but have since declined to 78L; under the altered circumstances of this concern, which will render its alliance a subject of competition to the neighbouring companies, we do not suppose these shares will fall much lower. Croydon have not been improved in their market value by the result of the half-yearly meeting; the dividend is not so large as was expected, and some disappointment is felt about new shares. Manchester and Buxton are moving again, and have been much inquired for—10L per share this morning. The extensions contemplated by this company must involve a considerable creation of new stock. Leeds and York, as we anticipated last week, have declined considerably, and are now quoted at 4L premium; they will be lower still, we think, before long. West Yorkshires and Ridings are heavy at 15L per share; the calling in of the scrip to register, which is likely to take place early, will have the effect of strengthening both stocks. Wakefield and Harrogates have run up considerably, in consequence of a probable amalgamation of interests with Mr. Hudson's party—8L premium, we understand, has been paid in some instances for these shares, prices having ranged since yesterday between that figure and 8L premium.

R. B. WATSON, TOOTAL, & BARFF.

COPPER ORES
Sampled on the 20th of August, and sold, on the 10th September, at Swansea.

Mines. Tons. Prod. Stand. Price. Mines. Tons. Prod. Stand. Price.

Santiago	87	17 $\frac{1}{2}$	95	£14 10	S. Jose in Cobre	40	13 $\frac{1}{2}$	94	£10 2 0
ditto	81	10 $\frac{1}{2}$	98	7 17	Chili	68	30 $\frac{1}{2}$	95	26 14 6
ditto	78	15 $\frac{1}{2}$	92	12 7	ditto	60	30 $\frac{1}{2}$	95	26 14 6
ditto	75	22 $\frac{1}{2}$	91	18 2	ditto	57	30 $\frac{1}{2}$	95	26 14 6
ditto	68	10 $\frac{1}{2}$	98	8 6	ditto	46	30 $\frac{1}{2}$	95	26 14 6
ditto	32	20 $\frac{1}{2}$	91	22 17 0	Knockmahan	88	8	109	7 1 0
ditto	30	28 $\frac{1}{2}$	88	23 5	ditto	71	63	116	5 3 0
ditto	29	30 $\frac{1}{2}$	87	24 18 2	Ballymurtagh	78	61	117	4 19 0
Cobre	109	12 $\frac{1}{2}$	96	10 3	ditto	43	45	126	3

The Mining Journal.

No. 525.]

ENLARGED SHEET.

[SEPTEMBER 13.

ATMOSPHERIC RAILWAYS.

TO RAILWAY COMPANIES, ENGINEERS, MANUFACTURERS, IRONMASTERS, AND TO ALL OTHERS WHOM IT MAY CONCERN.

NOTICE is hereby given, that the Atmospheric System, included in Pinkus's 1st and 2d Patents, of 1834 and 1836, and which is now about to be adopted on the Croydon Line, is, nevertheless (although practicable), but a crude and imperfect one of Mr. Pinkus's several systems, and involves an unnecessarily large outlay of capital in the construction, and an unnecessarily heavy expenditure in the annual working thereof; whilst, by Pinkus's new Systems, only about one-half the expense in constructing, and one-half in the working and annual maintenance, is incurred. The former long valve is dispensed with, and the loss by leakage thereof prevented—one line of pipe suffices for a double line of railway; each train is made to move under the influence of two stationary engines, at the termini of a section, simultaneously, by which means the amount of motive power is reduced by one-half, yet affording the required amount of propelling power. The stationary engines work constantly, husbanding power at intervals, when trains are not moving, thus inducing much economy. The propelling train is reduced in size to one-half the capacity required by the former system; yet affording the same amount of propelling power. Trains may be more frequently moved, and without danger. And by a further system (being the Atmospheric Locomotive), one line of pipe suffices for a double line of railway; the train, as before mentioned, moves under the influence of two stationary engines at the termini of a section simultaneously; the column of air in the pipe does not move with the velocity of the load; the immense loss of power consequent upon friction of air moving rapidly in the tube, is thus avoided; the quantity of air acted upon for an equal amount of propelling power, is only a fifth part of the quantity necessary by the former system—equal flexibility with the common steam locomotive system is obtained, the locomotive atmospheric engines being capable of moving forwards and backwards, as by the steam locomotive, more frequent trains may be moved without loss of time, and without waiting for the re-exhaustion of the propelling tube, the power of the locomotive greatly increased on inclined planes, without enlarging the tube, and perfect safety, from the possibility of a train moving off the rails, is secured.—These are advantages which Pinkus's other first system, about to be used on the Croydon Line, does not possess.

Models and drawings may be seen, and licenses granted, on application to the Committee of Management, 16, Charing-cross.

Communications addressed to Mr. David Thomas, Sec. pro tem.

HARVEY AND WEST'S PATENT VALVES,

APPLICABLE TO PUMPS OF EVERY DESCRIPTION.

The superiority of these valves, as economical in respect both of trouble and expense, has been proved by the experience of their GENERAL USE for more than SEVEN YEARS.

The patentees refer to nearly all the water-works, engineers in the kingdom, by whom satisfactory testimonials have been freely given.

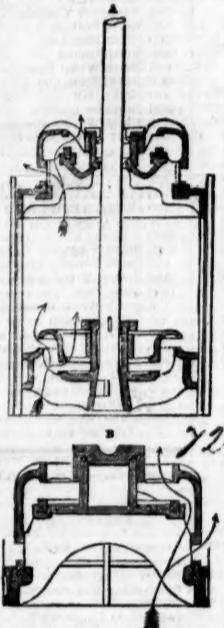
The principle adopted is that of "OBTAINING THE GREATEST WATER PASSAGE BY THE LEAST POSSIBLE PRESSURE AREA," thereby avoiding the great concussion occasioned by the closing of ordinary valves, and the loss caused by letting in air under them.

Until the invention of these valves (first used at the East London Water-Works), the most economical mode of raising water—viz., by the plunger-pump, and the principle of expansive steam, as practised in Cornwall, was impracticable for water-works purposes.

Sketch A shows the manner in which the valves have been applied to air-pumps of steam-engines.

Sketch B, the manner of their application to pumps for lifting water.

The valves are shown open in both sketches.



Address Messrs. HARVEY and WEST,
HAYLE FOUNDRY, CORNWALL.

PRINCIPAL MANUFACTURERS

MESSRS. HARVEY and CO.,
HAYLE FOUNDRY, CORNWALL.

OFFICE FOR PATENTS, 7, STAPLE INN, HOLBORN.

J. MURDOCH (successor and late assistant to Mr. Hebert) informs INVENTORS and PATENTEES, that at his OFFICE they can obtain

REFERENCE TO A CLASSIFIED LIST OF PATENTS,

THE ONLY ONE EXTANT, which shows at one view all the Patents ever granted for any particular object, whereby they may save much trouble and expense, and procure in formation not otherwise obtainable. BRITISH AND FOREIGN PATENTS OBTAINED, and USEFUL AND ORNAMENTAL DESIGNS REGISTERED.

SPECIFICATIONS carefully prepared, and REPORTS OF ENROLLED SPECIFICATIONS furnished on moderate terms.

FINISHED and WORKING DRAWINGS executed with accuracy and despatch.

THE TWENTY-FIFTH THOUSAND.

Just published in a sealed envelope, 3s., and sent free for 3s. 6d.

M ANHOOD : the CAUSES of its PREMATURE DECLINE, with plain directions for its perfect restoration; addressed to those suffering from nervous debility or mental irritation, followed by observations on the treatment of the class of diseases resulting therefrom; illustrated with cases, &c. By J. L. CURTIS and Co., consulting surgeons, 7, Fritton-street, Soho-square London.

TWENTY-FIFTH EDITION.

Published by the authors; and sold by Sirname, 21, Paternoster-row; Burgess, medical bookseller, 28, Coventry-street, Haymarket; Bart's, 4, Bridges-street, Strand; Hannay, 63, Oxford-street; Mann, 39, Cornhill, London; Guest, Birmingham; Sowler, 4, St. Anne's-square, Manchester; Phillip, 2, Castle-street, Liverpool; J. Clancy, bookseller, 6, Bedford-row, Dublin; W. and H. Robinson, booksellers, Grosvenor-street, Edinburgh; and sold in a sealed envelope by all booksellers.—Hours of consultation from Ten to Three, and Six to Eight in the evening.

"To the married as well as the unmarried this little work alike affords consolation and cure, and we are doing a service to society in recommending it to general notice."—*Essex and Herts Mercury.*

LAMERT ON DEBILITY, NERVOUSNESS, AND ALL DISORDERS ARISING FROM EXCESS, &c.

"He who in pleasure's downy arms / A hero lives, and justly can / Never lost his health, or youthful charms, / Exclaim, 'In me behold a man!'

Just published, the Seventh Edition, in a sealed envelope, price 2s. 6d.; or free by post to any address, for 3s. 6d.

SELF-PRESERVATION : A Popular Essay on those concealed disorders of the generative system, originating in solitary habits, youthful excess, or infection, and terminating in local and constitutional weakness, nervous debility, melancholy, incapacity, gonorrhœa, syphilis, indigestion, insanity, consumption, &c.; with plain directions for their treatment and cure. Illustrated with cases, &c. By SAMUEL LA'MERT, consulting surgeon, 9, Bedford-street, Bedford-square, London; Honorary Member of the London Hospital Medical Society, Licentiate of Apothecaries Hall, London, &c.

"The various positions of lover, husband, and parent, are the inherent privileges of mankind, and, but for the accidents of mortality, would be awarded equally to all. To such, among others, this essay addresses itself; and, by its perusal, many questions may be satisfactorily adjusted that admit of no appeal, even to the most confidential friend."

Stafford Gazette.
Sold wholesale by S. Gilbert, 51 and 52, Paternoster-row; retail by Starke, 23, Fleet-street, Quadrant; Hannay and Co., 63, Oxford-street; and Gordon, 146, Leadenhall-street.

At home daily, from nine to three, and from five till eight, and immediate replies sent to all letters, if accompanied by the consultation fee of £1 for advice, &c.

9, Bedford-street, Bedford-square, London.

Just published, a new and important Edition, price 2s. 6d.; free by post, 3s. 6d. —

THE SILENT FRIEND : a medical work, on Human Frailty, Nervous Debility, constitutional weakness, excessive indulgence, &c.; with Observations on Marriage, &c. By R. and L. PERRY and Co., surgeons, London. Published by the authors; and sold at their residence; also by Strange, 21, Paternoster-row; Hannay and Co., 63, Oxford-street; Noble, 109, Chancery-lane; Gordon, 146, Leadenhall-street; Purkiss, Compton-street, Soho, London.

The CORDIAL BALM of SYRACACUM is a stimulant and renovator in all spasmodic complaints. Nervous debility, indigestion, asthma, and consumption, are gradually and imperceptibly removed by its use, and the whole system restored to a healthy state of organisation. Sold in bottles, price 11s. and 32s.

THE CONCENTRATED DETERGENT ESSENCE.—An anti-syphilitic remedy for searching out and purifying the blood from venereal contamination, scurvy, blotches on the face, and body, ulcerations, and those painful affections arising from improper treatment, or the effects of mercury, removing secondary symptoms, and all eruptions of the skin. Price 11s. and 32s. per bottle; also £5 cases.

PERRY'S PURIFYING SPECIFIC PILLS have long been used as the most certain remedy for scrofulous complaints of every description, eruptions of the skin, pimplies on the face, and other disagreeable affections, resulting from an impure state of the blood. These pills are perfectly free from mercury, capaiva, and other deleterious drugs, and may be taken with safety without interference with or loss of time from business, and can be relied upon in every instance. Sold in boxes, at 2s. 9d., 4s. 6d., and 11s. each, by all medicine vendors—of whom may be had the *Silent Friend*.

Messrs. Perry and Co. may be consulted at their residence, 19, Berners-street, Oxford-street, daily, from eleven till two and five till eight. On Sundays from ten till twelve.

THE PATENT GALVANISED IRON COMPANY

call PUBLIC ATTENTION to the following, amongst other GREAT WORKS executed with their patent article:—

The ROOFS of the NEW HOUSES of PARLIAMENT, at Westminster.

The SLIPS, or SHEDS, for building "first-rates," in the ROYAL DOCKYARDS, at Woolwich, Portsmouth, Dartford, &c. (the latter visible in passing down the Thames, and is an object of great beauty, having a centre span of eighty-two feet). The Timber Sheds, and other buildings, in the Royal Dockyards, are also being roofed and constructed with this fire-proof material.

The BUOYS and other MARINE WORKS of the Honourable Corporation of the Trinity House have for two years been CONSTRUCTED with the Galvanised Iron, which reflects effectively the action of sea water.

The celebrated ELECTRIC TELEGRAPHS of Messrs. Cooke and Wheatstone are CONSTRUCTED exclusively with the company's Galvanised Wires, &c.

And this fire-proof iron, under all common influences—viz., sea water, saline or damp atmosphere, is admirably adapted for

ROOFING in all climates, being Fire, Hurricane, and Lightning proof; if a continuous communication be formed with the earth by Galvanised Iron Spouting attached to the roof.

DOCK-WORK, chain or wire rope bridges, wire fences, fire proof buildings, corrugated doors, shutters, greenhouses, conservatories, and an endless variety of purposes.

Roofs of gas works and chemical manufacturers.

Ship-building purposes—viz., blocks, bolts in feu of copper, and knees.

For chain rigging, wire rigging, and sheathing, it is extensively used, and the following

CERTIFICATE, amongst many others, is affixed:—

Lloyd's Register, London, February 7, 1845.

2, White Lion-court, Cornhill.

The undersigned surveyors to this society did, at the request of Messrs. Malins and Rawlinsons, examine the Patent Galvanised Iron Sheathing upon the bottoms of the brig *Mary Stewart*, lying in Messrs. Curling, Young, and Co.'s dry dock, Limehouse, and late unbroken and perfect throughout the vessel's bottom, and no appearance of corrosion or oxide of iron upon its surface. The iron that had been exposed by puncturing the nail holes had become coated with zinc—the sheathing was nearly clean, and free from marine grass and animalculæ. It appears to have answered very well during the before-mentioned voyage, and the ship has sailed without it being found necessary to do any repairs to it.

PETER COURTEENAY,

I. H. RITCHIE,

JAMES MARTIN,

Lloyd's Surveyors.

The company are prepared to supply all articles required, or execute work of every description.

WORKS—London, at Millwall, Poplar, near West India Docks; Staffordshire, Phoenix and Lea Brook Iron-Works—from which corrugated iron and every description of iron, galvanised or otherwise, can be supplied; also, from the South Wales Works, near Bridgend, Glamorganshire.

OFFICE—3, Mansion-house-place, London.

CAUTION AND NOTICE.

This GREAT PATENT, like every good one, is invaded, and, by the law's delays (and its miserable state as regards the interests of patentees), the parties are able to evade the consequences some short time longer. The same thing has occurred with other patents. In Nelson's Hot-Blast Patent the invasion went on for years: but one firm only had at last to pay upwards of (£120,000) ONE HUNDRED AND TWENTY THOUSAND POUNDS PENALTIES. BUYERS as well as SELLERS are LIABLE, and the PATENTEES will PROCEDE AGAINST all PARTIES who INVADE this—one of the most IMPORTANT INVENTIONS ever brought into use.

Actions are proceeding against Messrs. Morewood and Rogers, Messrs. Walker (Gospel Oak), and many others.

The company take this opportunity of giving the most unequivocal contradiction to the advertisement issued by Messrs. Morewood and Rogers on 8th August.

OFFICE—3, Mansion-house-place, London.

THE PATENT GALVANISED IRON COMPANY.

—CAUTION.—The public are cautioned against giving credit to the mis-statements put forth by the Galvanised Iron Company in their advertisement.

THE ONLY ACTION proceeding in regard to this Patent is one, NOT AGAINST MOREWOOD AND ROGERS, OR ANY OTHER PARTY CONNECTED WITH THEM, BUT A WRIT OF SCIRE FACIAS AGAINST THE COMPANY'S PATENT FOR ITS CANCELLATION.

Nothing can be more unfortunate than the comparison between this Patent and that of Nelson's, which was held by the jury to be valid, whereas THAT OF THE GALVANISED IRON COMPANY WAS, AFTER THREE DAYS' TRIAL, FOUND, UPON THEIR OWN EVIDENCE, TO BE INVALID.

They assert that their Patent is being invaded—they entirely deny; and to show the folly of the charge, the working of it was found by the jury to be impracticable. No one—not even they themselves—ever have, or ever will be able to work it.

In working as they now do, they have ADOPTED PART OF OUR PROCESS, specifically in our patent, WITHOUT OUR LEAVE OR LICENCE.

With regard to delay, it has been entirely on their part, as the records of the courts will prove. They have availed themselves of every opportunity to hinder and delay the *scire facias*, now proceeding, by applications for time, &c., and, finally, by putting in a plea, which their solicitor swore, he believed, to be necessary for the defence of their patent from cancellation, but which the Lord Chancellor, on Monday last, refused to admit, and dismissed their appeal with costs.

MOREWOOD AND ROGERS,

9, Steel-yard, Upper Thames-street.

PATENT GALVANISED IRON COMPANY.—NOTICE.

—This patent was decided by the jury, in Patterson v. Holland, tried in the Common Pleas in February last, to be invalid, and their verdict has not been set aside. The delay in actually cancelling the patent by the *scire facias* issued for that purpose, is solely attributable to the patentees resorting to frivolous and dilatory measures for postponing proceedings—thus showing that they well know how such proceedings must terminate.

—FOR ROOFING AND OTHER PURPOSES.

The large WAREHOUSES and SHEDS in the LIVERPOOL DOCKS have had the ZINC with which they were formerly covered STRIPPED OFF, for the purpose of being COVERED WITH IT; and the NEW DOCK WAREHOUSES of that city are likewise being COVERED WITH THIS METAL.

It is peculiarly ADAPTED for RAILWAY STATIONS, as forming a light, strong, and incorrodible covering.

This PROCESS is the ONLY ONE by which the QUALITY of the IRON is PRESERVED, instead of being injured; and it is, therefore, so very malleable, that it may be worked up with the greatest ease into articles of all descriptions.

Further information may be obtained on application at the WAREHOUSE,

NO. 9, STEEL-YARD, UPPER THAMES-STREET.

SUSPENSION BRIDGES.—ANDREW SMITH'S PATENT

GALVANISED WIRE ROPE AND CHAIN SUSPENSION, OR PARABOLIC TENSION, BRIDGES, are so constructed that the lateral oscillation and vibration (so destructive to the ordinary suspension principle) are entirely prevented by this improvement.

For deep ravines or cuttings, the Parabolic Tension Bridge costs much less than those on the suspension principle—piers, &c., being entirely dispensed with.

Drawings and models may be seen, and all necessary information had, on application at the offices, White Lion-court, Cornhill; 69, Princess-street, Leicester-square; or at the works, Millwall, Poplar.

THE TWENTY-FIFTH THOUSAND.

Just published in a sealed envelope, 3s., and sent free for 3s. 6d.

M ANHOOD : the CAUSES of its PREMATURE DECLINE, with plain directions for its perfect restoration; addressed to those suffering from nervous debility or mental irritation, followed by observations on the treatment of the class of diseases resulting therefrom; illustrated with cases, &c. By J. L. CURTIS and Co., consulting surgeons, 7, Fritton-street, Soho-square London.

Published by the authors; and sold by Sirname, 21, Paternoster-row; Burgess, medical bookseller, 28, Coventry-street, Haymarket; Bart's, 4, Bridges-street, Strand; Hannay, 63, Oxford-street; Mann, 39, Cornhill, London; Guest, Birmingham; Sowler, 4, St. Anne's-square, Manchester; Phillip, 2, Castle-street, Liverpool; J. Clancy, bookseller, 6, Bedford-row, Dublin; W. and H. Robinson, booksellers, Grosvenor-street, Edinburgh; and sold in a sealed envelope by all booksellers.—Hours of consultation from Ten to Three, and Six to Eight in the evening.

"To the married as well as the unmarried this little work alike affords consolation and cure, and we are doing a service to society in recommending it to general notice."—*Essex and Herts Mercury.*

LAMERT ON DEBILITY, NERVOUSNESS, AND ALL DISORDERS ARISING FROM EXCESS, &c.

"He who in pleasure's downy arms / A hero lives, and justly can / Never lost his health, or youthful charms, / Exclaim, 'In me behold a man!'

Just published, the Seventh Edition, in a sealed envelope, price 2s. 6d.; or free by post to any address, for 3s. 6d.

SELF-PRESERVATION : A Popular Essay on those concealed disorders of the generative system, originating in solitary habits, youthful excess, or infection, and terminating in local and constitutional weakness, nervous debility, melancholy, incapacity, gonorrhœa, syphilis, indigestion, insanity, consumption, &c.; with plain directions for their treatment and cure. Illustrated with cases, &c. By SAMUEL LA'MERT, consulting surgeon, 9, Bedford-street, Bedford-square, London.

ATMOSPHERIC RAILWAY GAZETTE.

LEEDS, HUDDERSFIELD, AND SOUTH STAFFORDSHIRE, OR LEEDS, WOLVERHAMPTON, AND DUDLEY DIRECT RAILWAY. (Provisionally Registered.)

Capital £1,700,000, in 85,000 shares of £20 each. Deposit £2 2s. per share.

PROVISIONAL COMMITTEE.

The Right Hon. the Earl of Shrewsbury, Alton Towers, Staffordshire.
 Sir William Young, Bart. East India Director, Westbourne-street, Hyde-park gardens.
 Sir George William Prescott, Bart. Theobalds, Deputy-Chairman of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Sir William Boothby, Bart. Ashbourne-hall, Derbyshire
 Sir William Lowthorp, Kn. Hull, and Ashbourne, Scarborough, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Colonel the Hon. Leicester Stanhope, Ashburnham-house, Chairman of Remington's London and Manchester Direct Railway
 The Sheriff of York
 Arnold, Henry, Esq. Uttoxeter, Director of Remington's London and Manchester Railway
 Bright, Selim, Esq. Buxton
 Burton, Robert, Esq. Bunker, Smallwood Manor, Uttoxeter, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Benwell, George, Esq. Uttoxeter, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Bradley, Septimus, Esq. Ashbourne, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Buxton, John Harry, Esq. Ashbourne
 Croft, Major J. T., 15, Regent-street, Deputy-Chairman of Remington's London and Manchester Direct Railway
 Clarke, Jeremiah, Esq. Macclesfield, Director of Remington's London and Manchester Railway
 Cooper, John Douglas, Esq. Holme Cottage, Ashbourne
 Crockett, T. Esq. Cannock, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Crossley, John, Esq. Lamberhurst, Sussex, and Uttoxeter, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Dalby, John Robert, Esq. Ashbourne, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Dale, Major Thurston, Ashbourne
 Daniel, Richard, Esq. Oak-hill, Stoke-upon-Trent
 Dawson, Samuel, Esq. sen. Ashbourne
 Earl, Thomas, Esq. Uttoxeter, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Edensor, Richard, Esq. Road Meadow, Ashbourne
 Fidler, Peter Pichott, Esq. Higgin Grange, Derbyshire
 Fisher, Thomas, Esq. Director of the Liverpool and Leeds Direct Railway
 Garle, Samuel, Esq. Uttoxeter
 Giplin, William, Esq. and Co. Wedges Mills, Cannock, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Haden, Joseph, Esq. Dudley, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Haden, Joseph, Esq. Dudley, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Hafied, Thomas, Esq. Rugeley
 Haines, Samuel, Esq. Chad House, Edgbaston, Director of the Leicester and Birmingham Railway
 Hartstone, Robert James, Esq. Ashbourne
 Johnson, John Goodwin, Esq. Bentby-hall, Ashbourne
 Johnson, D. T. Esq. Alderman Churchyard, Director of the Chester and Manchester Railway
 Johnson, Richard William, Esq. Moorgate, Director of Remington's London and Manchester Direct Railway
 Jones, the Rev. J. P., Vicarage, Alton, Staffordshire
 Knight, Edward, Esq. M.D. Stafford
 Keene, John Joseph, Esq. St. John's Wood, Regent's-park, Director of the National Bank of Ireland, &c.
 King, William, Esq. Waterloo-place, Director of the Freemasons' Life Assurance, &c.
 Lee, J. Wheatey, Esq. Worcester, Vice-Chairman of the Severn Commission
 Lawrence, Richard Corbett, Esq. Wansfield Hall, Uttoxeter
 Langley, Henry, Esq. Rakeaway House, Chedde
 Laver, Richard, Esq. Uttoxeter
 Lassetter, James, Esq. Uttoxeter
 Meteyard, Horace William, Esq. Director of Remington's London and Manchester Railway, Middle Temple, and Chatham-place
 M'Mahon, Daniel, Esq. Wolverhampton, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Manors, John, Esq. Rugeley
 Mellard, James, Esq. Rugeley
 Minors, John, Esq. Eaton Dovedale, Derbyshire, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Minors, John, Esq. Uttoxeter, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Mountfort, Thomas John, Esq. Ashbourne
 Mathew, John Mee, Esq. Assistant Tithe Commissioner, Director of the East and West Junction Railway, &c.
 Milner, William, Esq. Tiverton, Staffordshire, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Marton, Joseph, Esq. Walsall, Staffordshire, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Maskery, Thomas, Esq. Northbury, Derbyshire
 Orton, James, Esq. Woodford, Uttoxeter, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Parkinson, John, Esq. F. R. S. Cambridge-terrace, Hyde-park, Director of the Northampton, Bury, and Cheltenham Railway, &c.
 Pulteney, Douglas Kinross, Captain, Parliament-street, London, Director of the Nottingham and Boston Railway
 Phillips, William, Esq. Springfield House, Uttoxeter, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Robinson, John, Esq. Silcock's Cottage, Wakefield
 Saint, Edward, Esq. Cannock, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Shipton, Robert, Esq. Scropton, Derbyshire, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Smith, Charles, Esq. Alton, Staffordshire
 Smith, Thomas, Esq. Blore Hall, Staffordshire, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Smith, William, Esq. Sedbury, Derbyshire, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Smith, Wm. Esq. Clifton, Derbyshire, Director of Tean and Dove Valley Railway
 Smith, John, Esq. Barton House, Derbyshire
 Smythe, John Vere, Esq. Kensington, Middlesex, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Spiers, K. J. Esq. Carlton Villas, London, Director of the East and West Junction Railway
 Stevenson, Thomas, Esq. Director of the Agriculturalist Cattle Assurance Co.
 Terry, Benjamin, Esq. Mayor of Walsall, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Tomlinson, Thomas, Esq. Brancaster Pastures, Ashbourne
 Tomlinson and Jones, Messrs. Brokers, Ashbourne
 Toogood, Rupert, Esq. Ashbourne
 Tyecote, Edward, Esq. Great Heywood, Staffordshire
 Tyler, George, Esq. Holloway-place, Holloway, London, Director of the East and West Junction Railway, &c.
 Waller, Major, K.H. St. James's square, Director of the Chester and Manchester Railway, &c.
 Walter, James Smith, Esq. Bakewell, Derbyshire
 Walters, J. T. Esq. Rugeley
 Weston, Thomas, Esq. Tean, Staffordshire
 Wise, Thomas, Esq. Ashbourne
 Witham, John, Esq. Ashbourne
 Woolrich, Thomas, Esq. Uttoxeter
 Wood, Charles, Esq. Uttoxeter
 Wood, William, Esq. M.D. Chetwynd House, Newport, Director of the Derbyshire, Staffordshire, and Worcestershire Junction Railway
 Wood, William Hurd, Esq. of Ashbourne
 Wright, Thomas, Esq. Derby, Director of the Derby and Gainsborough Railways.

BANKERS.

Messrs. Rogers, Olding, and Co. Clement's-lane, London

Messrs. Barnard, Dimsdale, and Co. Cornhill, London.

SOLICITORS.

John Owens, Esq. 35, Moorgate-street, London

William Arnolds Bainbridge, Esq. Uttoxeter

ENGINEERS—Sir John Hennie, F.R.S.; George Remington, Esq. C.E.

LOCAL AGENTS.

Armishaw, J. Esq. Rugeley

Bolton, Thomas, Esq. Wolverhampton

Bolton, John, Esq. Dudley

Eggington, A. Esq. Lichfield

James J. Green, Esq. Walsall

This line of railway, which is about sixty-five miles in length, is intended to commence at Uttoxeter (the terminus of the proposed Derbyshire, Staffordshire, and Worcestershire Junction Railway), and to proceed to Sheffield and Huddersfield.

It will form a direct communication between two of the most important manufacturing and mining districts in England—viz., South Staffordshire and Sheffield, and Rotherham in Yorkshire; the South Staffordshire portion, including Dudley, Tipton, Walsall, Bilton, Wednesbury, and Wolverhampton.

This line will also open a direct railway communication between Leeds, Huddersfield, and the West Riding of Yorkshire and Kidderminster, Worcester-shire, Cheltenham, Gloucester, Bristol, Taunton, and Exeter, and with Ludlow, Leominster, Hereford, Brecon, Cardiff, Neath, Swansea, Llanelli, Carmarthen, Milford Haven, Fishguard, Aberystwyth, and with Porthcawl, the future outlet for Ireland. And also the most direct communication between Leeds and Southampton. The line will pass nearly along the Uttoxeter and Caldron Canal to a point near Prestwood, in case the canal be purchased by the promoters of this undertaking. It will proceed through Ellastone and Mayfield to Ashbourne, thence near Dovedale, Buxton, and Chapel-en-le-Frith, Woodhead, and Holmfirth, to Huddersfield, where it will join the Huddersfield and Leeds Railway, and so to Thirsk. It will open new mines, in addition to those already in work, of lead, coal, iron ore, barytes, and carboniferous and magnesian limestone on the route, in addition to forming a direct, speedy, and cheap communication between the important towns above mentioned. Arrangements have been made with other companies to run into this line from Sheffield. This company reserves the right to raise additional capital to extend the line to Leeds.

Many of the above-mentioned mineral productions are essential to the mining districts of South Staffordshire and Sheffield. The North Staffordshire and Derbyshire limestone is much superior to that of South Staffordshire in the fluxion of iron (15 cwt. of the former being equal to a ton of the latter), and producing a better quality of material. At present, the mode of transit is very circuitous and expensive, the line from the Caldron mines having to go by canal round Etruria, Leek, and the Potteries, to the Dudley and surrounding furnaces, when, by this railway, it would be taken in a straight line to them; and the Ashbourne, Cromford, Worksop, and Bakewell country would have an entirely new trade opened to them. The limestone in the neighbourhood of Sheffield is also becoming very scarce, and great quantities are introduced from Scotland; the same scarcely exists in South

Staffordshire; and the route of this line would furnish a good supply, at present not worked, and without a market, both north and south. In addition to these great advantages, a good local market would be opened along the agricultural and other parts of the district, at present very badly supplied with lime and coal, and that of an inferior quality, and by expensive carriage. It is, therefore, next to impossible to calculate the immense traffic which would pour down this line and the Derbyshire, Staffordshire, and Worcestershire Junction Railway.

The calculations which have been made show a very large profit.

There are large lead and slate quarries on the line which only want an outlet like the one now contemplated to bring them into full work. The coal is of a superior quality.

There are also extensive barytes and paint-works at Ashbourne, Cromford, and other places on the line. The scenery of Derbyshire is the resort of vast numbers of tourists—and particular care will be taken, in passing of the line near Dovedale, not to interfere with, or change, its beautiful and romantic character. The convenience, therefore, which this line will afford must necessarily cause a great influx of passengers, both on business and pleasure.

Ironstone is not so abundant in the South, as in North, Staffordshire, and vast quantities are sent by the tardy, circuitous, and expensive canal company, which this, and other lines of railway meeting at Uttoxeter, will remedy. The gypsum formation runs from Staffordshire to the Humber, and the demand for this article for building, agricultural, and manufacturing purposes along this line will be great. The timber from the neighbourhood of the Needwood Forest, Banks, Bagots Woods, and Kingston Woods, upwards of 4000 acres, chiefly finds its way to the Manchester market by a highly objectionable route; whereas this line would open a direct, easy, and cheap communication to new markets. The line has been viewed prior to a detailed survey, and there are not more than ordinary engineering difficulties. In consequence of the late Parliamentary decisions, it is intended to make this line on the broad gauge principle, but the promoters do not pledge themselves absolutely to do so.

At the urgent suggestion of some of the most influential inhabitants of Ashbourne, the committee have ordered a survey of a junction to connect that town with Derby and with the Derby and Gainsborough and Midland Railways.

Applications for shares to be made to John Owens, Esq., 35, Moorgate-street. London; and William Arnold Bainbridge, Esq., Uttoxeter; and the following share-brokers:—Messrs. Preece and Evans, 39, Lothbury; Mr. Miles, Worcester; Mr. Thomas Henry Wheeler, Worcester; Messrs. Towney and Whitehead, Liverpool; Messrs. Cameron and Co., Liverpool; Mr. Morris Reynolds, Liverpool; Mr. Richard E. Hine, Macclesfield; Mr. James Jamieon, Leeds; Messrs. Welbeloved and Oastler; Messrs. Frederick Stamp, Hull; Mr. Thomas Boardman, Blackburn; Mr. George Clark, Bradford; Mr. William Mason, Bradford; Mr. William Cronheim, Halifax; Mr. Charles Spencer, Nottingham; Messrs. Eyr and Shaw, Derby; Messrs. Grayston and Earle, York; Mr. E. H. Armitage, Wakefield; Mr. James Stoecheltenham; Mr. Joseph Clark, jun., Southampton; Messrs. Tate and Nash, Bristol; Messrs. Beaumont and Langworthy, Exeter; Mr. Thomas Sandford, Exeter; Mr. J. S. Holland, Coventry; Messrs. Houghland and Lesse, Manchester; Messrs. Cardwell and Sons, Manchester; Messrs. A. Birchall and Co., Manchester; Messrs. T. N. Bardwell and Sons, Sheffield; Mr. W. H. Collis, Birmingham; Mr. L. Wetherburn, jun., Huddersfield; Messrs. Evarard and Co., Huddersfield; Messrs. Payne and Freer, Leicester; Mr. Nicholson, Edinburgh; Messrs. Duncan and Hutchinson, Glasgow; Messrs. Labertouch and Stafford, Collegegreen, Dublin; Mr. Andrew Milligan, Birkenhead.

FORM OF APPLICATION FOR SHARES.

To the Provisional Committee of the Leeds, Huddersfield, Sheffield, and South Staffordshire Direct Railway.

Gentlemen.—I request you to allot me shares of £20 each in the above railway; and I undertake to accept the same, or such less number as you may appropriate to me, subject to the regulations of the company, and to sign the necessary deeds, and to pay when required, the deposit thereon of £3 12s. per share.

Dated this day of 1845.

Name in full
 Profession and professional residence
 Residence in full

YORKSHIRE, DERBYSHIRE, AND CHESHIRE JUNCTION RAILWAY, SHEFFIELD, BUXTON, CONGLETON, AND CREWE LINE.

Provisionally Registered.

This railway will commence at Sheffield, contiguous to the terminus of the Sheffield and Rotherham line, and will be carried through or near Bakewell, Buxton, Macclesfield, Congleton, and Sandbach, to Crewe, by which it will be immediately connected with Birkenhead. A direct railway communication will thus be established from Sheffield and the whole of Yorkshire, through the heart of Derbyshire, to Chester, Birkenhead, and North Wales, and facilitate the intercourse from the east coast to Ireland. The numerous advantages of this railway are obvious.

It passes through a country wholly destitute of railway accommodation, will open to the inhabitants of Yorkshire on the one hand, and of Cheshire on the other, the romantic and beautiful scenes of Chatsworth, Bakewell, Matlock, and Buxton, to which it is proved that there have been 100,000 visitors annually, certain to be much increased by means of this line. Accommodating in its course the towns of Macclesfield, Leek, Congleton, and Sandbach (the seat of the silk manufacture), containing a population of 80,000 inhabitants; the line will also invite a very extensive traffic from the iron districts of Wolverhampton, the manufacturers of the Staffordshire Potteries, the rich coal-fields of Biddulph, the salt-works of Northwich, the mineral districts of North Wales and Derbyshire, and the rising and rapidly increasing commerce of Birkenhead.

One of the first engineers of the day has been appointed in chief, and the surveys are rapidly progressing, but the final report of the engineer has not yet been received. As soon as that report is made, the whole scheme will be in a complete state to be presented to the public. Powerful support has been already obtained, and the undertaking will be brought out under the most favourable auspices. In the allotment of shares local interests will be duly regarded.

A prospectus will be immediately issued, announcing a provisional committee of great power and responsibility, the amount of the proposed capital, the names of the engineer, and other officers.

Communications from persons feeling interested in the proposed undertaking, or desiring prospectuses, may be addressed to Messrs. Gregory, Faulkner, Gregory, and Bourdillon, 1, Bedford-row, London (the Parliamentary agents); George Sawkins, Esq., Leek; or John Latham, Esq., town clerk, Congleton.

PROVISIONALLY REGISTERED.

SOUTHAMPTON AND GREAT WESTERN JUNCTION RAILWAY.

RAILWAY.

Capital £750,000, in shares of £20 each.—Deposit £2 2s. per share.

It is admitted that a railway to connect the highly important packet and commercial port of Southampton with Wales, Gloucester, Cheltenham, and the north-western district of the country is required, and must prove highly lucrative.

The line will accomplish this object, with the least outlay of capital, and with the least interference with existing interests, must command preference.

The one proposed will form a junction from the South-Western Railway, at Bishop's Stoke, with the Great Western, at Swindon, by which an unbroken line will be effected from Brighton and the eastern coast of England, through Chichester, Fareham, Portsea, Gosport, Southampton, Stockbridge, Andover, Marlborough, and thence onward to the Swindon station of the Great Western Railway, accomplishing this great national object by a rail not exceeding forty-four miles in length.

The company propose to avail themselves of the spacious terminus of the Southampton Docks, and avoiding all the great difficulties and objections to trains running the entire length of the public quays, a course which must be incident to any independent terminus.

As a passenger line it is of the highest importance, but regarding it commercially, as opening to the southern coast the vast coal and mineral districts of South Wales, the Droitwich and other salt mines, the cloth manufactories of Gloucestershire, the manufacturing districts of Birmingham, Manchester, and the north-west, and affording a direct route to Dublin, it must be considered as offering pre-eminent advantages. The evidence given in 1842, before Parliament, proves that the cost of the Great Western Railway, from Swindon to Cheltenham alone, was £1,500,000, and that by the easiest course the most eminent engineering science could select; a more direct course from Swindon to Cheltenham was wisely abandoned by the Great Western Company as a wasteful expenditure of capital; this expenditure is altogether saved by the proposed line, and it cannot be supposed that the Legislature will sanction a route before abandoned in consequence of its engineering difficulties, which would now be in direct opposition to the enormous outlay it might reduce it to the town of Cheltenham.

To these advantages it is apparent that the heavy expense of distinct termini at Swindon and Southampton will be saved, while the interests of the Great Western and South-Western Companies are identified with the project.

The names of a highly influential directory will be published in a few days; in the meantime, applications for shares may be made to William Bevan, Esq., solicitor to the company, at their temporary offices, 6, Old Jewry, London; and to Messrs. Sharp and Harrison, solicitors, Southampton.

AN ACT TO AUTHORIZE THE SOUTHAMPTON AND GREAT WESTERN JUNCTION RAILWAY.

BRANCH TO BIRMINGHAM. CHAIRMAN.—EDWARD PEEL, Esq.

Deputy Chairman.—THOMAS BRAMALL, Esq.

J. D. HARRIS, Esq.

THE HON. CAPT. CARNEGIE, M.P.

JOHN RIDGWAY, Esq.

RICHARD GREENE, Esq.

HARVEY WYATT, Esq.

THOMAS HAMILTON, Esq.

James Durham, Esq.

Notice is hereby given, that the Leicester and Tamworth Junction Railway Company have determined upon making a branch from their line, commencing at or near Market Bosworth or Twycross, and running from thence by or near Atherton and the Whitchurch Junction of the Midland (late Birmingham and Derby) Railway to Birmingham. The directors have determined to increase their capital by the creation of additional shares, with reference to which further notice will shortly be given. The surveys of this branch are in progress, which is reported as early as possible.

The twofold advantages now offered by this project, give it a manifest superiority over every other measure which has yet been devised for traversing this rich and extensive, but hitherto unintercepted, portion of the midland counties. The Leicester and Tamworth Junction, as originally projected, brings, by means of the Trent Valley Railway, the important manufacturing town of Leicester, and the midland and eastern counties, into immediate communication with the mining districts and wool markets of Staffordshire and Shropshire, the great towns of Liverpool and Manchester, and the intervening localities; whilst the projected branch affords the shortest practicable railway route from Leicester to Birmingham, and the western and south-western counties of England.

The construction of the Birmingham branch, in conjunction with the Leicester and Tamworth Railway, gives this project an evident advantage, in point of expense, over any independent line from Leicester to Birmingham; and, taking the inequalities of the country into consideration, a more direct line does not appear desirable or practicable, and the saving which will be effected, of more than half the expense which must attach to the construction of an independent line from Leicester to Birmingham, is a most important consideration.

EDMUND PEEL, Chairman.

J. E. RATHBONE, Secretary.

PRELIMINARY ANNOUNCEMENT.

SOMERSETSHIRE AND NORTH DEVON JUNCTION RAILWAY, FROM BRIDGEWATER TO ILFRACOMBE, (With Extension to Barnstaple reserved.)

Provisionally Registered, pursuant to 7 & 8 Vic. cap. 116.

Capital £600,000, in 30,000 shares of £20 each.—Deposit £2 12s. per share.

This railway will take its commencement at the town of Bridgewater, in Somersetshire, and extend its line from the point of junction with the Great Western and Direct Western and Exeter Railways, on the broad gauge, in nearly a direct course, through or contiguous to the towns of Nether Stowey, Watchet, Dunster, Minehead, Old Cleeve, Stoke Pero, West Porlock, Parracombe, Combe Martin, to Ilfracombe, in North Devon; thus forming an undeviating and perfect coast line along the Bristol Channel, and throughout a range of country at present totally deprived of railway communication.

A detailed prospectus, with a list of the provisional committee, &c., will be published in a few days; in the meantime all communications and applications for shares may be addressed to Edward Lewis, Esq., at the temporary offices, 7, Adam-street, Adelphi, London.

</

HAMBURGH, ALTONA, AND LUBECK RAILWAY COMPANY.—The directors of this company having, by public advertisements, inserted in the London, Hamburg, Altona, and Lubeck newspapers, of the month of July, 1839, announced the DISSOLUTION of the COMPANY, by the unanimous resolution of a general meeting of proprietors, held at the George and Vulture Tavern, in London, on the 3d day of June, 1839;

And, by subsequent advertisements, in the aforesaid newspapers, of the month of August, 1839, the directors having announced their readiness to pay to the holders of shares of the aforesaid company a dividend, or return of deposit, of £s. 6d. per share, on the surrender of the certificates representing such shares;

And it appearing, notwithstanding the aforesaid announcements, that a few certificates of shares are still outstanding, the dividends on which have not been claimed,

The directors hereby give this final Notice, that, being desirous of winding up the affairs of the aforesaid company, they will continue to pay the dividend of £s. 6d. per share on such certificates as may be presented for that purpose, and surrendered up to be cancelled, until the 31st day of December next, after which period no further applications will be attended to.

Applications, until the 31st of December next inclusive, may be made to Mr. J. M. Mandie, No. 32, Great Winchester-street, London; or to Mr. Emilie Müller, of Hamburg, who are authorized by the directors to liquidate the still outstanding claims on the company.—London, Sept. 12, 1840.

J. M. MAUDE.

SHROPSHIRE UNION RAILWAY AND CANAL COMPANY. (Registered Provisionally, pursuant to the Act of 7 and 8 Vic., cap. 110.) Capital £5,000,000, in shares £50 each.—Deposit £2 2s. per share.

PROVISIONAL DIRECTORS.

The Earl of Powis, G.C.B. Chairman
The Earl Talbot, K.G.
The Earl of Lichfield
The Earl Granville, G.C.B.
Viscount Combermere, G.C.B., G.C.H.
Viscount Hill
Viscount Clive, M.P.
The Hon. Robert Henry Clive, M.P.
Lord Leveson, M.P.
The Hon. Colonel Anson, M.P. Chairman of the Trent Valley, Midlands, and Grand Junction Railway Companies
Sir John Robert Browne Cave, Bart.
Sir Thomas Edward Winnington, Bart. M.P.
Sir Andrew Vincent Corbet, Bart. Acton Reynold, Shrewsbury
Sir Francis Lyttelton Holycroft Goodricke, Bart. Studley Castle, Warwickshire
John Parker, Esq. Wolverhampton
Bernard Dickenson, Esq. Colebrook Dale
Richard Darby, Esq. Colebrook Dale
Thomas Eytton, Esq. Eytton
Thomas Campbell Eytton, Esq. Donnington
William Orme Foster, Esq. Shourbridge Iron-Works
Joseph Gibbons, Esq. Wolverhampton
John Horton, Esq. Prior's Lee Hall, Shifnal
George Jones, Esq. Spring Vale Iron-Works, Staffordshire, and Shackerley, Shropshire
T. W. Giffard, Esq. Chilington Hall, Staffordshire
William Luton, Esq. Dolera
Edward Monkton, Esq. Somerford Hall, Staffordshire
Edmund Pilkington, Esq. Bone Hill, Fazeley, Chairman of the Trent Valley Railway Company
Major-General Brook Parley, Rutland-gate, Knightsbridge
James Taylor, Esq. Birmingham
William Tarrant, Esq. Wolverhampton
W. H. Sparrow, Esq. Wolverhampton
Messrs. J. and E. Walker, Gospel Oak Works, Staffordshire
Philip Williams, Esq. Wednesbury Oak Works, Staffordshire
William Harley Bayley, Esq.
George Briscoe, Esq.
John Edwards, Esq.
Joseph Grout, Esq.
George Holyoake, Esq.
John Hazlehead, Esq.
George Harper, Esq.
George Loch, Esq.
Paul Griffith Panton, Esq.
John Stanton, Esq.
George Stanton, Esq.
John Williams, Esq.
Joseph Whately, Esq.
James Durham, Esq.
Robert Gardner, Esq.
Henry Newbery, Esq.
John Meeson Parsons, Esq.
Joseph Paxton, Esq.
George Sander, Esq.
Henry Tootal, Esq.
James Walkinshaw, Esq.
Harvey Wyatt, Esq.
Richard Barrow, Esq.
William Gabbett Bear, Esq.
George Royle Chappell, Esq.
John Chapman, Esq.
Henry Dunn, Esq.
Thomas Groves, Esq.
James Grignon, Esq.
Edward Hancock, Esq.
John Knill, Esq.
Matthew Lyons, Esq.
James Watkins, Esq.
William Rickford Collett, Esq. M.P. Chairman of the Chester and Holyhead Railway Company
William Henri Thomas, Esq. Deputy Chairman of the Chester and Holyhead Railway Company
Joshua Proctor Westhead, Esq. Chairman of the Manchester and Birmingham Railway Company
David Waddington, Esq. Deputy-Chairman of the Manchester and Birmingham Railway Company

COMMITTEE OF MANAGEMENT.

THE EARL OF POWIS, G.C.B. Chairman.

JOSHUA PROCTOR WESTHEAD, Esq. Deputy Chairman.

Richard Barrow, Esq.
Thomas Groves, Esq.
George Holyoake, Esq.
George Harper, Esq.
George Loch, Esq.

ENGINEERS.

William Cubitt, Esq.
Robert Stephenson, Esq.
William Alexander Provis, Esq.

BANKERS.

Messrs. Glyn, Halifax, Mills, and Co. London
Messrs. Jones Loyd and Co. Manchester
The Bank of Liverpool
Messrs. Taylor and Loyd, Birmingham
Messrs. Beckett and Co. Leeds
Messrs. Rocke, Eytton, and Co. Shrewsbury and Ludlow
Messrs. Holyoake and Co. Wolverhampton
Messrs. Williams and Co. Chester
Messrs. Becke and Co. Welshpool
Messrs. Berwick and Co. Worcester

SOLICITORS.

Messrs. Parker, Hayes, Barnwell, and Twisden, 1, Lincoln's Inn-fields, London
Messrs. Potts and Brown, Chester
Messrs. Slater and Heels, Manchester
James Wheeler, Esq. Manchester
Messrs. Loxdale and Peel, Shrewsbury
Henry Heanc, Esq. Newport

SECRETARIES.

Robert Samuel Skeet, Esq.; W. L. Cowan, Esq.
Temporary Offices, 107, Jermyn-street, St. James's, London.

This company has been formed by the union of the United Ellesmere and Chester and Birmingham and Liverpool Junction, the Shrewsbury and the Montgomeryshire Eastern Branch Canal Companies, with the promoters of the Worcester, Shrewsbury, and Crewe, and Shrewsbury and Trent Valley Union Railways, and has for its object the conversion into railways of the greater part of the canals possessed by the above-mentioned companies, and the formation of new lines of railway in conjunction therewith, so as to give a complete system of railway accommodation to the districts lying westward of the Grand Junction Railway between Cheshire on the north, and Worcester on the south.

Arrangements have been made for admitting the Shrewsbury and Birmingham Railway Company into this union, so soon as they shall have obtained their Act of Parliament. It is also proposed to invite the Montgomeryshire Canal Western Branch Company to join the company. The following are the lines of railway proposed to be undertaken by the company, under the advice of their engineers, Mr. William Cubitt and Mr. Robert Stephenson:—

- From the proposed Birmingham, Wolverhampton, and Stour Valley Railway, at Wolverhampton, by Authority, Brierwood, Gnosall, Norbury, Market Drayton, Audlem, and Nantwich, to the Chester and Holyhead and Chester and Birkenhead Railways at Chester.
- From the Manchester and Birmingham Railway at Crewe, by Nantwich, Wrenbury, Whitchurch, Ellesmere, Oswestry, and Welshpool, to Newcastle.
- From the Trent Valley Railway at Stafford, by Gnosall, Newport, and Wellington to Shrewsbury.
- From the main line near Wem to Shrewsbury.
- From the Birmingham and Gloucester Railway in the Valley of the Avon, passing the Severn at Worcester, and proceeding through Bewdley and Bridgnorth, over the Severn below Coalport to Wellington.

The surveys of these lines are in a forward state, and all the requisite steps will be taken preparatory to an application to Parliament in the next session for their formation.

The existing canals have been valued by the engineers, and it is proposed, that paid up capital in the amount agreed upon in the new company, shall be appropriated to the said interests, power being given in the Act of Incorporation to vest the whole of their property in the new company.

The estimated cost of the conversions and construction of the new lines of railway, is proposed to be raised by subscription among the shareholders of the Ellesmere and Chester and Birmingham and Liverpool Canal, and the several railway companies before enumerated, leaving a reserve for local and other interests.

The shareholders in the Worcester, Shrewsbury, and Crewe Union Railway, and the Shrewsbury and Trent Valley Union Railway Companies, will be severally entitled to the same amount of capital in this undertaking as they now hold in their respective companies.

Arrangements have been made with the Manchester and Birmingham and the Chester and Holyhead Railway Companies, for allotting a proportion of the capital to them, and a similar offer has been made to the Chester and Birkenhead Railway Company.

All communications are requested to be addressed to the temporary offices of the company, 107, Jermyn-street, St. James's, London.—London, September, 1840.

DIRECT LONDON AND MANCHESTER RAILWAY.
OFFICES, 48, MOORGATE-STREET, LONDON.
(Provisionally Registered.)

COMMITTEE OF MANAGEMENT.

DEPUTY CHAIRMAN pro tem.—JOHN DILLON, Esq.

Mr. Alderman Hooper
Thomas Shepperson, Esq.

William White, Esq.

William Lawrence, Esq.

MR. ALDERMAN SIDNEY.

ENGINEERS.—John Urpeth Rastrick, Esq.

BANKERS.

London—Messrs. Jones Loyd and Co. Lothbury

Manchester—Messrs. Jones Loyd and Co.

Beds.—Thomas Barnard, Esq.

Stockport—The Bank of Stockport

Leicester—Pare's Leicestershire Banking Company

Northampton—The Northamptonshire Union Bank

Wellingborough—The Northamptonshire Union Bank

Macclesfield—Messrs. Brocklehurst and Co.

Dublin—Messrs. Boyle, Low, Pitt, and Co.

JOINT SOLICITORS.

Messrs. Ashurst and Son, 137, Cheapside

Messrs. Sudlow, Sons, and Trott, 20, Chancery-lane

The letters of allotment will be issued on Wednesday next, the 17th inst.

EDWARD L. OGEE, Secretary.

ELECTRIC TELEGRAPH COMPANY,
COOKE AND WHEATSTONE, PATENTEES.

(PROVISIONALLY REGISTERED.)

English Patents dated 12th June, 1837;

" " 18th April, 1838;

" " 21st January, 1840;

" " 8th September, 1842;

" " 6th May, 1845.

PRELIMINARY ANNOUNCEMENT.

The Electric Telegraph is already established, or in course of formation, to an extent exceeding 500 miles, upon the following metropolises and other lines of railway:—

METROPOLITAN LINES.

SOUTH-EASTERN LINES.

LONDON AND BIRMINGHAM

LONDON AND CROYDON

LONDON AND BLACKWALL (about

to be united by a branch with the Eastern Counties Railway).

COUNTRY LINES.

NORTH MIDLAND LINES.

YARMOUTH AND NORWICH

MAIDSTONE AND TUNERIDGE

PRESTON AND WYRE

LEEDS AND MANCHESTER

EDINBURGH AND GLASGOW.

Arrangements for the formation of this company have been in progress for a month past, in connection with some of the leading railway interests.

The object of the company is to establish a complete system of telegraphic communication, connecting the metropoles with the different ports and cities of the kingdom.

The railway companies which have already adopted the Electric Telegraph, will be invited to concur in the accomplishment of this national undertaking.

The telegraphs already laid down are adapted for the reception of the requisite additional wires without further expense.

A detailed prospectus will shortly be issued—in the meantime communications may be addressed to Messrs. Wilson and Harrison, solicitors, 1, Calthorpe-buildings, London.

PILBROW'S ATMOSPHERIC RAILWAY AND CANAL PROPULSION COMPANY.—Completely Registered.

DIRECTOR.

The Right Hon. the Earl of Essex, Chairman.

G. B. Bolton, Esq.

Captain Britton.

Directors of Railway and Canal Companies.

and informed that this company is now

READY TO GRANT LICENSES FOR, or SUPERINTEND THE LAYING DOWN OF

LINES ON PILBROW'S ATMOSPHERIC PRINCIPLE.

The advantages offered by this method of propulsion are cheapness, increased speed, and safety, over every other existing system, whether locomotive or atmospheric. Leakage is entirely avoided, the tube being buried. Also an immense saving, as well as the construction in the working of lines, not requiring tunnelling, levelling, or embankment. The surface required but little more preparation than for the common roads.

The application of this method of propulsion to Canal Navigation will be attended with incalculable advantages.

Its superiority, efficiency, and simplicity, will be demonstrated, and explanations given,

at the offices of the company, 6, King William-street, London-bridge.

CHARLES COLLINS, Secretary.

PROSSER'S RAILWAY ON WIMBLEDON COMMON.—ALTERATION IN TIME OF RUNNING THE TRAINS.—In future the trains will CEASE TO RUN in the MORNING, but CONTINUE TO RUN DAILY, from One till Seven o'clock p.m. This line of railway, of two miles in length, has been laid down at great expense, to TEST THE ADVANTAGES OF PROSSER'S PATENT GUIDE WHEELS.

It contains gradients of 1 in 50, 1 in 75, and 1 in 200; and curves of the radii of 100 feet.

All particulars may be had of Mr. George Hadley, 36, New Broad-street, City.

Hydraulic Apparatus and Tanks—Millwall, Poplar, nearly opposite Greenwich.

OFFICE, 53, KING WILLIAM-STREET, LONDON-BRIDGE.

PAYNE'S PATENT PROCESS FOR THE PRESERVATION AND IMPROVEMENT OF TIMBER.—AND PAYNE'S AND LODER beg to invite the attention of Engineers, Railway Companies, Architects, and others, to the ABOVE PROCESS, and to state that they are prepared to ERECT the necessary APPARATUS in any part of the United Kingdom, where the quantity is sufficiently large to cover the outlay of its removal. Further particulars can be obtained at WHITEHALL WHARF, CANNON-ROW, WESTMINSTER, or at their other stations—FLEETWOOD-ON-WYRE, LANCASHIRE, UNION WHARF, SOUTHAMPTON, WISBECH, CAMBRIDGESHIRE, GUILDFORD, SURREY.

COPPERISING TIMBER.—MARGARY'S PATENT.—THE CHEAPEST AND BEST, THE WHOLE COST OF PREPARING A LOAD OF TIMBER, including the patent right, BEING ONLY TWO SHILLINGS.

This patent is used by Messrs. Brunel, Locke, and other celebrated engineers, and on the following railways:—Bristol and Exeter, Bristol and Gloucester, Cambridge and Norwich, Ipswich, Manchester and Sheffield, Southampton and Gosport, Southampton and Dorchester, Paris and Rouen, Rouen and Havre, Orleans and Bordeaux, and is now being used to the extent of 577 miles more.

The Board of Ordnance, after trying various patents, have come to the conclusion that this is the best preservative, and the patentee is now preparing FIFTY THOUSAND YARDS OF CANVAS for their use.

OFFICE—QUALITY-COURT, CHANCERY-LANE.

CORNUBIAN MINING COMPANY.

The annual general meeting of the shareholders in this company was held at the offices, 44, Finsbury-square, on Tuesday, the 9th inst.

PETER STAINSBY, Esq., in the chair.

The advertisement convening the meeting having been read, the following report of the committee appointed on the 12th May last to investigate the company's affairs, was read:—

REPORT.

The committee have occasion deeply to deplore that the new capital raised for the purpose of working Ventonians was not so applied, having no doubt that, had that been done, the concern would have assumed a very different position. As it is, our committee, after several meetings, not feeling satisfied with their knowledge of the capabilities of the concern, determined to incur the expense, and have the mine surveyed by competent persons, wholly unconnected with it; and, hearing that Mr. Henry Thomas was proceeding to Cornwall, determined to avail themselves of his knowledge, and to combine with him a captain of known standing and experience; for this purpose they fixed on Captain W. Richards, of Tresevern and other mines, and now offer for your consideration their joint report. Assuming that such report meets the approbation of all parties concerned, your committee feel warranted in advising, that the additional works recommended be instantly put in hand, and all operations be confined to the ground until all ores visible are extracted, as they are of opinion that, during these operations, fresh discoveries will be made, and that they may be carried on without additional means, and until the results are known they deem it unnecessary to increase the capital. The committee call attention to another point—economy. They consider the London expenses far too great, and having reason to believe that the London expenses could be carried on for 100/- per annum, recommend that such sum be appropriated for the purpose, and they recommend that some of the influential shareholders should join the present directors. Your committee cannot conclude without expressing to Mr. Stainsbys their best thanks for the ready manner in which he has met them, and afforded all information.

The report of Messrs. Richards and Thomas, above referred to, was also read, which, after going into extensive detail as to the appearances and prospects of the mine, recommended that the men should be continually employed in proving to the utmost the ground easily approached

Mining Correspondence.

ENGLISH MINES.

HOLMBUSH MINING COMPANY.

Sept. 9.—In the 100 fathom level, west of Hitchins's shaft, north and south, the lead lode is eighteen inches wide, producing saving work; in the stopes in the bottom of this level, west of Hitchins's winze, the lode is eighteen inches wide, worth 30/- per fathom; in the stopes east of ditto the lode is fifteen inches wide, and worth 16/- per fathom; the stopes in the bottom of this level, east and west of the sump winze, are at present suspended; in the stopes in the back of the 100 fathom level the lode is eighteen inches wide, worth 24/- per fathom. In the ninety fathom level, west of Hitchins's shaft, the lode is 14 in. wide, producing stones of ore, and ground more favourable. T. RICHARDS.

TRELEIGH CONSOLS MINING COMPANY.

Sept. 6.—In Christoe shaft, below the eighty fathom level, we are sinking in the country—ground favourable; down 7 fms. 4 ft., and expect to get to the ninety fathom level this month. In the ninety fathom level, west of sump winze, the lode is four feet wide, worth 30/- per fathom, still from appearance likely to improve. In the eighty fathom cross-cut, north of Garden's shaft, the ground is pretty favourable, and we expect to cut the lode next week. In Good Fortune shaft, below the seventy fathom level, the sumpmen are cutting eastern platt, &c., and preparing to fix a plunger lift at seventy fathom level. In the rise above the seventy west the lode is three feet wide, producing stones of ore, and hope to hole to the sixty this month. In the sixty fathom level, west of ditto, the lode is two and a half feet wide, worth 8/- per fathom. In the fifty fathom level, west of Symons's, the lode is two feet wide, with stones of ore; in the fifty fathom cross-cut, north of ditto, the ground is rather more favourable. In the winze below the thirty-four, west of ditto, we are cutting winze, platt, &c., no lode taken down. In the twenty fathom level, west of ditto, the lode is eighteen inches wide, with stones of ore; in the adit, west of ditto, the lode is twenty inches wide, with a branch on the south part worth 4/- per fathom. In the twenty fathom level, west of Garden's, on a north lode, the lode is eight inches wide, but little mineral. W. SYMONS.

WEST WHEAL JEWEL MINING ASSOCIATION.

Sept. 8.—The ground in Buckingham's engine-shaft, sinking below the 100 fathom level, is very hard; we have about two feet further to sink to complete the lift, which will be fifteen fathoms, after which we shall have ten fathoms to drive south to intersect Wheal Jewel lode—sunk last month 1 fm. 1 ft. 6 in. In the 100 fathom level west, on ditto, the lode is small and unproductive—driven 1 fm. 2 ft. 6 in.; in the 100 fathom level east, on ditto, the lode is two and a half feet wide, worth 5/- per fathom—driven 1 fm. 4 ft. 6 in. north, and south 3 ft. 6 in. In the eighty-five fathom level west, on ditto, the lode is worth 6/- per fathom—driven 2 fms. 5 ft. In the seventy fathom level west, on ditto, the lode is worth 8/- per fathom—driven 2 fms. 2 ft. 6 in. In the fifty-seven fathom level east, on ditto, the lode is worth 5/- per fathom—driven 2 fms. 5 ft. In the forty-two fathom level east, on Buckingham's lode, the lode is small and unproductive—driven 2 fms. 4 ft. 6 in. In the thirty fathom level west, on Tolarcane lode, the lode is two and a half feet wide, containing good stones of tin—driven 1 fm. 5 ft. 3 in. In Wilkinson's shaft, sinking below the fifteen fathom level, the lode is two and a half feet wide, composed of spar, mundic, and stones of ore—sunk 1 fm. 2 ft. 6 in. In the deep adit, west on ditto, the lode is large, but poor—driven 1 fm. 1 ft. S. LEAN.

CORNUBIAN MINING COMPANY.

Sept. 4.—I have this day been underground with Capt. Grose in the usual way for the setting on Saturday, and it has occurred to me that I ought to write to you separately from my official report of Monday.—I am of opinion, in conjunction with Capt. Grose, that the bottom of this mine (eighty-six fathom level) presents quite as encouraging an appearance as it has done in any level, which has been seen since the present company has had possession of the property. We have driven at the eighty-six fathom level, west of Murray's engine-shaft, altogether about eighteen fathoms, and have taken away nearly all the backs up to the seventy-eight fathom level at a very low tribute. The bottom, going down below the eighty-six fathom level, and which remains untouched, is, in our opinion, quite as good as the back, which has been worked away; the north lode also at this level has been seen only in one place about six fathoms west of Murray's engine-shaft, where, from appearances, it seems likely to turn out a great deal of lead, but it is of that hard nature that it cannot be broken with speed. A second cross-cut is now in course of driving, about eleven fathoms apart from the first, and we think six feet more, or thereabouts, will intersect the lode; the appearances of the country here are exceedingly promising and congenial for lead; the eastern end on Chiverton lode is also kindly noticed before that we had driven eighteen fathoms to the west of the shaft through good ground. We saw nothing of this lode until Wednesday, nor can we now say anything about it, we expect it will prove to be the Western Caunter, and looks at present an important discovery—these are facts which I thought you ought to be in possession of, for your government, against the general meeting on the 5th, and as well the cause of altering my opinion of the concern, although, in the meantime, I cannot promise even sufficient returns to meet the cost for the next three months to give these objects a trial, even if the shareholders determine to continue working; but one thing, I beg to observe, had the mine been my own, and liable to lose 300/- in that time, I certainly would work to that extent for the reasons just assigned—viz., to see what the new objects would turn out; in conclusion, we calculate that a party of good fellows as sumpmen, say eight, with four boys, would take to sink Murray's engine-shaft to another level eight fathoms deeper, as absolute bargain for about 100/- or 110/-, which would be the means of raising a good deal of lead, judging from the appearances of the lodes gone down in the bottom of the eighty-six fathom level. R. ROWE.

Sept. 8.—Since my last report, in driving west of Murray's engine-shaft, on Chiverton lode, we have fell in with something like the western caunter, making its way in a direction south-west; it consists of three rich branches of lead, averaging about three inches each, and within three feet of ground between these branches, there is a soft spar and killas mixed with elvan. So far we consider it a very promising discovery; yet, it is premature to say what it will turn out. We have set the end to drive on its course at 90s. per ton of lead. The Chiverton lode here is not so rich as noticed last week, but still of encouraging appearance; the same may be said of the lode going east. In the cross-cut, driving north, at this level, we are in congenial ground for the north lode, which will, no doubt, be seen by the following report of Saturday last. Those working at the levels above—viz., seventy-eight and seventy, chiefly on the north lode, are much as usual, yielding some good work, but the lode and ground is very spare for breaking. At the seventy-eight fathom level we have abandoned the north lode recently cut, not being worth following. At the sixteen fathom level we have intersected a small, but promising, east and west lode, going in a proper direction to cut the caunter if there to be met with. R. ROWE.

BEDFORD UNITED MINING COMPANY.

Sept. 8.—At Wheal Marquis, the new engine-shaft is 3 fms. 3 ft. under the seventy fathom level. The lode in the seventy fathom level east is two feet wide, composed of spar, mundic, and ore, good saving work; and in this level west the lode is one and a half feet wide, composed of spar and mundic, with good stones of ore. The lode in the fifty-eight fathom level east is improved, being two feet wide, composed of gossan, spar, mundic, and ore, good saving work; and in the stopes in the bottom of this level the lode is two feet wide, worth 19/- per fathom. The lode in the rise, in the forty-seven fathom level west, is one and a half feet wide, and worth 5/- per fathom. The pitches are without alteration. At Ding Dong, in Thomas's engine-shaft, there has been nothing since last report; we expect, however, to resume sinking in a few days. At Wheal Tavistock, Phillips's engine-shaft is 4 fms. 4 ft. below the twenty-five fathom level, the lode is two feet wide, composed of gossan, spar, and ore, saving work; and in the twenty-five fathom level the lode is twenty inches wide, composed of gossan, spar, and good spots of ore in places.—J. PHILLIPS.

HAWKMOOR MINING COMPANY.

Sept. 8.—We have commenced driving the fifteen fathom level, west of Hitchins's shaft, where the lode is one foot wide, composed of spar, mundic, and copper ore. The lode in the western shaft continues about two feet wide, composed of fine gossan, black and yellow copper ore, producing work of a fair quality. P. RICHARDS.

CALLINGTON MINING COMPANY.

Sept. 8.—At the north mine, in the ninety fathom level, driving north, the lode continues productive, leaving backs that will work at 5s. in the 11/2; the south end has been suspended for the past week, the men being engaged rising to the level above, for the better ventilation of this part; the ground is soft, and lode rich, will work on tribute at an average of 4s. in the 11/2. The air being deficient in the eighty fathom level, operations in the end have been suspended for the present; the men are engaged rising. As soon as the seventy fathom level is extended far enough south, we intend sinking a winze to meet the said rise; the backs we are rising through will work at 8s. in the 11/2; in the seventy fathom level the lode has not been taken down. At present the mine is very full of stuff, the winding-engine being scarcely a match for us, which has prevented us sinking the engine-shaft under the ninety fathom level; we hope, shortly, to make such an arrangement, as will enable us to do so. In the south mine there is nothing new to remark on, the lode not being taken down in either of the levels, with the exception of the eighty fathom level, driving north, where we have a channel of elvan; the lode is one foot wide, composed of flookan, quartz, and lead, good work, cutting out a large stream of water. A considerable improvement from the sixty fathom level, where we had it much more compact for several fathoms, the lode being split in strings; the engineers are engaged in fixing the winding-engine, the whole of which is not yet on the mine. J. T. PHILLIPS.

WHEAL SARAH MINING COMPANY.

Sept. 6.—I beg to inform you that the engine-shaft is now sunk to the depth of thirty-one fathoms below the surface, where the ground becoming hard, and the water having increased, we considered it prudent to suspend sinking, and to commence driving north and south on course of the lode, which we did on Tuesday last; the north part consists of quartz and carbonate of iron, with spots of lead; the south part also contains a little lead, disseminated in a softish clay slate. The east and west course discovered in the south end, at the twenty fathom level, is cut through, and the lode opened on, which is about one foot wide, producing good stones of lead; the ground, however, being hard, we do not anticipate having much ore whilst it continues. I regret very much that the quarry should have extended so far in this direction, as whilst the lode is being explored in it, no good results will be obtained; the lode in the north end continues its regular size of about two and a quarter feet wide; it consists mostly of a decomposed clay slate, with mundic, accompanied by small crystals of galena; it has rather a promising appearance, and we are not a little surprised that more lead is not found in it. We have cut through the lode in the shaft sunk in the eastern ground; it is large, but it does not present such good indications as it did a few feet only below the surface, we have, consequently, suspended operations in this part. JOHN PRINCE.

SILVER VALLEY MINING COMPANY.

Sept. 8.—I beg to say, that in the deep adit level, on the north tin lode, we have cleared all the old workings below the shallow adit, and are now taking away a piece of ground left in the western part of the stopes, to bring in levels from the deep adit in order for driving the end; the lode here has a better appearance than stated last week, being about two and a half feet wide, composed of capel, spar, peach, flookan, with tin, six inches of which is saving work; the men are getting on well, in clearing the stuff from the stamps and floors, and will complete their bargain this week. S. RICHARDS.

UNITED HILLS MINING COMPANY.

Sept. 9.—In Williams's shaft the lode is two feet wide, good ore. In the eighty fathom level, in the eastern end, the lode which we are carrying is five feet wide, producing ore throughout, of average quality; in the western end the lode is three and a half feet wide, producing a small quantity of ore. In the seventy fathom level, eastern end, we have cut through the cross course—the lode is looking more promising than it has been for some time past; west of diagonal shaft the lode is three and a half feet wide, two feet ore of fair quality; west of James's the lode is eighteen inches wide, producing some stones of ore, but not rich. In the sixty fathom level, east of eastern shaft, the lode is two and a half feet wide, eighteen inches ore of fair quality; west of James's shaft, and east of Harper's winze, we hope to communicate in a day or two; we can report no alteration in the appearance of the lode since last reported. In the fifty fathom level no alteration for the past week. In the thirty fathom level the lode is one foot wide, producing a small quantity of ore. In the ten fathom level, eastern end, the lode is two feet wide, poor. At Wheal Sparrow, in the fifty fathom level, eastern end, the lode is two and a half feet wide, eighteen inches ore of fair quality, looking promising; in the western end the lode is eighteen inches wide, producing stones of ore. In the forty fathom level we have holed the rise in the back of this level, east of Gibson's shaft, to the twenty-seven fathom level. In Wheal Charles, the men have again resumed driving the forty end east; west of Gibson's, the lode is eighteen inches wide, producing but little ore. In the thirty fathom level no lode broken since last reported. T. TREVENEN. R. WILLIAMS.

GUNNIS LAKE MINING COMPANY.

Sept. 8.—At Chilsworthy, Bailey's engine-shaft is holed to the adit level, the lode throughout is about two feet wide, composed of gossan and spar, with stones of copper ore in places. In the adit level east the lode is two feet wide, composed of gossan and spar, with stones of copper ore in places.—W. RICHARDS.

FOREIGN MINES.

UNITED MEXICAN MINING ASSOCIATION.

Guanaxuato, July 25.—Mine of Rayas.—Every practical exertion has been made to expedite the several works of speculation and research; results thus far have added nothing to the hopes entertained of ultimate success, as respects new and compensating returns. The small bunches of rich ore in San Ambrosio have disappeared altogether, without, however, destroying the favourable appearances of this point in other respects. The work of Santa Cecilia continues in somewhat less hard rock, and affords the same expectation as to final results when the lode shall have been reached. In the direction of San Miguel the works are not so productive, and several pairs of barrows have, consequently, been taken off with the view to reduce expense, commensurate with reduced returns. Although the following comparative statement of the general produce during the last five weeks shows a deficiency in the quantity of picked ores and sales by buscones, with an increased outlay, as compared with the immediately preceding five weeks, still as there has been a strike for higher wages amongst a portion of the workmen, who have since then returned to the mine on the same terms as previously, and a considerable reduction in prices of the buyers of ores—while on the score of outlay, various articles, especially gunpowder and horses, for future consumption, are included therein, it is considered that these causes have conduced to a diminished produce during the aforementioned period, rather than any serious or positive unfavourable change in the mine, and, in corroboration of the view, my estimate of actual returns against expenditure, gives me a clear surplus of about \$1000 per week, which is full as much as the general average of the last three months:—

5 wks. end.	Picked ores.	amt. sales.	Outlay.	Excess of Outlay
June 14.—Cs. 2270 0	\$18,176 2 0	... \$21,474 2 2	... \$3298 0 2	
July 19. 2157 1	14,072 5 4	21,242 4 3	7169 6 7	

Cs. 112 1/2 Decrease. Decrease. Decrease. Increase.

By the receipt of \$13,707 6 1, the mine debt was thereby reduced to \$692,341 3 6.

Quicksilver.—The invoice of eighty bottles, shipped per steamer *Severn*, is to hand, and its amount, 13281 19s. 2d., has been carried to the debit of the company.

Remittances.—The next Tampico conducta will leave hence in about a month, and by that conveyance, I purpose to forward a remittance to the directors, the amount of which will not, I trust, fall short of \$30,000. J. N. SHOOLBRED.

Note.—A Bill of Exchange of 1500/-, at sixty days' sight, has been received by this packet.—London, Sept. 11. JOHN MATHER, Sec.

ANGLO-MEXICAN MINING COMPANY.

Guanaxuato, July 21.—Aunction has given the following weekly results:—

Memoria.	Sale.	Mine profit.
June 21. 8713 0	\$1915 3	8 244 5
28. 740 0	1862 7	191 3
July 5. 441 5	1575 1	345 7
12. 526 5	1567 3	257 1
19. 659 2	1318 4	143 7

Total profit in five weeks \$182 7

Sirena.—The accounts rendered for the third period ending 21st ult. showed a loss of \$152 3 9. Since then, as many of the buscones who were attracted from this mine to Aunction, a few weeks ago have returned, the produce has been greater, and it is, therefore, probable, that up to the present time a moderate profit may have been realised, but there is nothing new in the general features of the mine.

Haciendas.—Escalera has been finally given up, and the debt against it for repairs, which is \$1904 2, will be paid off out of the future rent; at present, however, it is without a tenant, and so also, I am sorry to say, is Partita.

Finance.—The accompanying statement shows an asset of \$113,770, against a liability of \$21,169, which liability to the extent of \$20,169, due on the Rayas ore account, will be paid off to-morrow. JOHN STANLEY.

BOLANOS MINING COMPANY.

San Clemente, July 16.—Since my respects of the 15th ult, I am favoured with your secretary's letter of 1st of May.

ZACATECAS DISTRICT.—SAN CLEMENTE, SAN NICOLAS, AND MALANOCHE MINES.—Partido.—The workings of San Abundio having been given to the buscones since my last, has kept up the produce from this source in San Nicolas and the disputed ground, the quality has also somewhat improved.

Resered Workings.—The pairs of men formerly working in San Abundio have been placed in the roof of La Luz, where, after a very few shots, the ore became much poorer, so that there has been again a falling off in the produce; such as it is, however, we may expect it will continue for some time to come, as the winze of San Francisco, now communicated with La Luz, has come down all the way in good ore, and the bottoms of La Luz are still unbroken. The rises of Santo Tomas, although not rich, still give profitable employment to our men.

Discovery Works.—The west end of San Francisco level is, since the last fortnight, completely in borrasca; the lode has been through the last three months almost equally unpromising, and we had begun to think we had seen the limit of the bunch of ore, but yesterday a little improvement was reported in this end. The ends of Dios nos Guie, Santo Tomas, and San Fernando continue as unpromising as before. The cross-cuts of San Abundio and Santiago have found nothing yet. In the sinking of San Nicolas shaft a branch of Santo Tomas vein has already been cut, in the same worthless blonde and bronze seen in the trials of San Jacobo, on San Fernando level.

SANTA BARBARA MINE.—The cross-cut of San Crispin has been suspended, and we have put the hands on an end in the lode cut through in May, called Santa Rosalia, containing a little vein of pyrites, from 1 in. to 3 in. wide, which says 7 mcs. per monton; in a fortnight's driving its character has not altered.

SAN FRANCISCO DE PAULA MINE.—Since my last we have been driven out of our deepest working—the exploring winze of Buen Suceso—by a heavy feed of water, which it was found impossible to master by hand drainage; the water rose about three varas, and there remains, until an effectual drainage can be made by a new shaft, which will be commenced next week, and sunk with all possible speed. The produce of ore last month was 14-8 cargas; the average ley, as shown by the torta already washed, must be taken at 15 mcs. per monton; the two ends to the east continue in the same state as last advised. The west end of the 126 level has, for the first time, produced some specimens of ore. In the winze of Buen Suceso the ground left above the water level is

too near the 125 vara level to warrant new ends, and I have, therefore, put in four pairs of men to break what ores they can, and, notwithstanding that the best have been covered by the water, they more than cover their costs. The winze of San Miguel continues sinking without any discovery of interest.

VETA BELLA MINE.—At the owner's urgent solicitation I have been induced to try a winze in the adit of La Luz, and just at the entrance, in a spot of some promise, occasional specimens having been met with, showing both native silver and rosiclar (ruby silver), but I acknowledge I do not entertain much expectation from this trial, and its chief recommendation is its trifling cost.

Statement of the General Results of the Mines and Haciendas in the Zacatecas District—June, 1845.

||
||
||

venturers, under the name of the Tavy Consols. In its former workings upwards of 14,000£ were expended, and the mine was very much opened, so that the present company have had a large portion of their work already done for them. The Little Duke is joined to Hocklake, both of which are included in the present sett, and Hocklake has the great Treasnewy road laid down as running through it in the Ordnance survey map. The mine will be worked in 1024 shares, most of which will be in the hands of London adventurers. Another new mine is about to be set on, to be called New Wheal Maria, in the parish of Bridestow, under Brent Tor. The sett is granted and in the hands of the adventurers. It is looked upon as a very promising affair, and we suppose that even its name will induce some of the parties to hold on. The mine is to be divided in this case in 256 shares. We should state that the sett is much smaller than that of the Tavy Consols, and the expense of effectually working it will be in consequence considerably less.—*Plymouth Journal*.

COCKLEY BECK COPPER MINES, ULVERSTONE.—These mines are at present in a highly satisfactory state: the prospects are good, and the ore is of a superior quality.—*Cumberland Paquet*.

NEW COLLIERY.—For some time past active measures have been in progress for the "winning" of coal on the estate of Isaac Flavell, Esq., the extensive railway contractor at Stonehouse Farm, in the parish of Northfield, near Harborne, Staffordshire. The sinking has already been carried down thirty yards: and from the indications held out by the appearance of the strata cut through, the proprietor is sanguine that he shall be successful in his undertaking at a moderate depth. Should the coal be shortly won, and of good quality, being in the vicinity of the Dudley Canal, and other good means of conveyance, it will prove highly beneficial to the neighbourhood for many miles round.

MINE ACCIDENTS.

Kilbricken Mines, Ennis.—William Murphy was crushed to death between the catch piece and wings of the engine.

Brockmoor.—T. Bartlett was killed by the damp in a coal-pit at Gorsey Bank.

—E. Percival fell down a pit at Coseley, and was killed.

Blaenau'r Colliery, near Aberdare.—An explosion, happily unattended by loss of life, took place in this colliery, the property of Mr. Davies, of Hirwain. This accident, like too many others, was entirely owing to the recklessness of the men, who, contrary to orders, had constructed a doorway, and which, impeding the current of air, caused an explosion, which so shook the district, as to resemble an earthquake. But few men were present, and they fortunately escaped by severe burning.

Deron Iron-works Colliery, near Styling.—An old miner, named Paterson, was killed by a fall of coal.

Bogside Colliery, near Gatehead, Kilmarnock.—While repairing the engine, the scaffolding gave way, and precipitated two miners (J. Taylor and R. Miller) down the pit—Taylor was killed, and Miller seriously injured.

GRAND LONDON AND DUBLIN APPROXIMATION RAILWAY.

At a very influential meeting of the provisional committee of the above railway, held at the Guildhall Coffee-house, yesterday, Lord CLAUD HAMILTON, M.P., in the chair, it was moved by WILLIAM SEYMOUR, Esq., seconded by Captain ROGERS, and resolved unanimously—that the first and most important point connected with the internal communication of Great Britain is the obtaining a direct, safe, rapid, and independent route from the metropolis of England to the capital of Ireland—that it is impossible to overrate the political and commercial advantages of avoiding every unnecessary mile of distance between the great cities of London and Dublin, and the intervening rich mineral, agricultural, and manufacturing line of country—that the Grand London and Dublin Approximation Railway, as detailed in the prospectus now laid on the table, is an undertaking, which, when completed, must shorten the distance between London and Dublin by nearly seventy miles—that it offers advantages to the English and Irish public of a character truly national, and is worthy of our most strenuous support.—It was moved by W. JOHNSON NEALE, Esq., seconded by R. H. PURCELL, Esq., and resolved unanimously—that the populous and ancient assize town of Shrewsbury is in every way entitled to a more direct and independent line of railway to London than any that has hitherto been projected—that the recent and unhappy differences between the London and Birmingham and the Grand Junction Railways, have revealed to the public the danger and delay inseparable from a long line of route, depending on the unanimity of different and competing railways—that the Grand London and Dublin Approximation Railway will, from its independent and direct character, avoid these dangers—that it will not, in any way, interfere with any of the lines projected between Wolverhampton and Salop—that it will tend most immediately to restore to Shrewsbury the prosperity it formerly enjoyed as a species of Welsh metropolis, and the grand halting spot of passengers and traffic between England and Ireland.—It was moved by Mr. HEATH, and seconded by Mr. REMMETT, and agreed to unanimously—that the thanks of this meeting be given to the gentlemen who form the committee of management, for the energetic and proper manner in which they have conducted the affairs of the company, and that they be requested to spare no exertions to bring before Parliament this session an undertaking so national and commercial as the Grand London and Dublin Approximation Railway.

(Signed) CLAUD HAMILTON.

His lordship having vacated the chair, it was moved and carried unanimously—that the thanks of this meeting be given to his lordship for his and able conduct in the chair.—Sept. 12, 1845.

NEW ROSS, CARLOW, AND KILKENNY RAILWAY.—We are given to understand that active measures are being taken for carrying out this projected line, so as to insure not only the most favourable gradients, but, at the same time, to render available those facilities the ground presents, which is stated to be free from engineering difficulties. The survey having been completed, and the report made, from which it appears the line can be made at less than 5000£ a mile, the attention of the board of management is now more particularly directed to an amalgamation with other lines, as to the station at Carlow, so as to diminish, as far as practicable, the expense of "establishment," an item which is severely felt by many of the lines. With this view, we understand, the Great Leinster and Munster, the Wexford and Carlow, and the New Ross, Carlow, and Kilkenny contemplate forming a grand junction at Carlow, so as to meet the Dublin and Cashel line. There can be no doubt of the policy of such a course, as applies to each of the several companies, for by concert, they may not only serve themselves, but very materially serve the public.

PRELIMINARY ANNOUNCEMENT.

BRISTOL, BATH, AND BRIDGWATER GRAND JUNCTION RAILWAY.

Connecting with the Great Western Railway on the one side, and on the other with the Bristol and Exeter Railway, the following important places:—Keynsham, Burnet, Markbury, Stanton Priory, Farnborough, Finsbury, High Littleton, Hallaton, Paulton, Wellton, Midsummer Norton, Radstock, Kilmersdon, Newberry, Coleford, Elm, Frome, Leigh-upon-Mendip, Stoke Lane, Downside, Shepton Mallet, Crosscombe, Dinder, the city of Wells, Coxley, Polsham, Glastonbury, Street, Walton, Ashcot, Higher and Lower Pedwell, Greinton, Shipwark, Catcott, Edgington, Moorlinch, Sutton Mallet, Chedzoy, Dunwear, and Bridgwater.

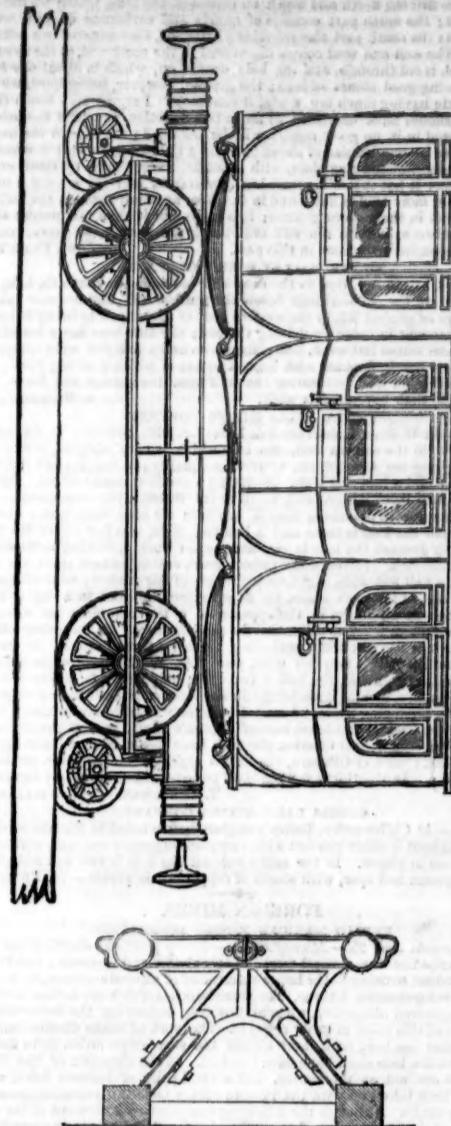
It is proposed that this Grand Junction line should start from near the station of the Great Western Railway at Keynsham, and proceed by Burnet to Marksbury and Farnborough. Thence it will pass on the west side of Finsbury, and go on through the numerous and extensive coal-works by Radstock, Camerton, and Clandown, to Radstock. Thence to Kilmersdon, which it will skirt on the western side, and thence through Babington to the eastern side of Newberry, from which there will be a branch line to Frome, passing by Elm on the southern side. The main line will hold its course beside the Upper and Lower Wobster coal-works, and Gooeved's coal-works, through Melcombe Wood to the southern point of Leigh-upon-Mendip. Thence it will proceed over Long Cross Bottom to the western side of Bodden, and to the eastern side of Shepton Mallet, and the western side of Downshire. Its course thence will be along the western sides of Ham, Crosscombe, and Dinder, to the southern point of the city of Wells. From this it will hold its way between Coxley and Coxley Pound to the western side of Southsay and the eastern side of Polsham, and so on to the western side of Glastonbury, where it will cross the North-road. Thence passing Bickworth Mill, it will skirt on the northern side, Street and Walton, past Ashcot on the southern side, proceed on the north side of Higher Pedwell between Shipwick and Greinton, and so on to the northern side of Moorlinch. Thence to the northern side of Sutton Mallet, then over Sutton Woor to Chedzoy, passing over Fowler's Plot, then through Dunwear to the southern side of the Bridgwater Station on the Bristol and Exeter Railway, and thence spanning the railway into the borough of Bridgwater.

The length of the main line will be about forty-three miles; that branch from Newberry to Frome, four miles seven furlongs. The line has been carefully laid down after accurate investigations, and it presents no engineering difficulties whatsoever. There will be no tunnel or viaduct, or other costly work, and there will be no heavy cuttings or embankments. The line passes through a fertile, rich, and populous district, and serves all the principal towns in the county of Somerset, and brings them into connection with all the regions traversed by the Great Western and the Bristol and Exeter Railway, and with the metropolis. It is so obvious that this Grand Junction Railway must command an immense traffic in passengers, goods, and minerals, that it would be idle to dilate on the subject.

A prospectus, containing the list of the provisional committee, the amount of capital required, the number of shares to be issued, and the names of the officers will be published in a few days, accompanied by a map of the line and the adjacent country, laid down upon the scale of one inch to a mile.

EDWARD LEWIS, 7, Adam street, Adelphi.

PROSSER'S RAILWAY GUIDE AND SAFETY WHEELS.



An acute writer on railways, years ago, foretold the necessity of a more economical system of railways than that ordinarily adopted. His observations on the subject were something like the following:—"How many small towns and villages will, sooner or later, be blotted from the map of England, unless a more economical system, than that ordinarily adopted, be introduced." The great cost of first-class iron railways is a complete preventive to the ramifications of such a system being extended into the rural districts of Britain, though the necessity of direct and rapid communication with all towns and places, the inhabitants of which desire to be classed among civilised people, is fully apparent at the present time. Happily means—yes, effectual means—are at hand, for extending the beneficial influence of rapid communication to every part of Great Britain and Ireland. Wooden railways—though 200 years old—have never till lately been rendered usable for passenger traffic. Prosser, however, by the introduction of his ingenious guide and safety-wheels, has effected that which has so long been a desideratum in the railway world—viz., a system of constructing and working railways so economical, as to be within the reach of every small town in the kingdom; nor is this statement founded merely on experiments made on a model, the ordinary method of introducing new inventions and new systems to public notice; but it is from the actual daily working, ever since the 18th of June, of a fully-appointed train, travelling at from twenty to twenty-five miles an hour, over gradients of the third class, and round curves of ten chains radius, and less. All is open to public view—no closet exhibitions; but, go when you will, to Wimbledon Common, between the hours of one and six daily, you may command the use of the train, to make any experiments that may suggest themselves to your mind. Many of the first men of the day have gone down to Wimbledon Common, with minds prejudiced against Prosser's system, and have, after their visits, been constrained to allow, not only that there is something, "but much, in it." It is, of course, the interest of some parties to cry out against wood; but can they cry out against safety? Who—that reads the almost daily accounts of fearful railway accidents, chiefly owing to trains running off the way—but would not, if he has a spark of humanity remaining in his composition, do all in his power to mitigate, if not entirely prevent, so great and crying an evil? Rely on it, if trains continue to run off the rails, coaches will be required to run on the roads; yes, the four-in-hand will again be in vogue, in spite of the great speed acquired by steam on railways, with the almost daily occurrence of accidents. Safety is a great point in Prosser's system—the guide wheels are so admirably suspended from the carriages, that if the train inclines to one side or the other, it is entirely prevented from getting off, even though a piece of wood, or other substance, be placed across one of the rails; while the cylindrical bearing wheels keep their even course on the top surface of the wooden rails, instead of grinding down the edge of the rails, as in the case of the conical flange wheel on the iron rails; moreover, the bearing wheels revolve on their axles, each wheel, therefore, in rounding a curve, observes its natural course, thus grinding and destruction are prevented. Indeed, from experience it is found, that the rails on Wimbledon Common are not worn at all by the constant passing of the train over them.

It must be remembered, that every day improvements will suggest themselves to those who are entrusted to carry out the system; only look back to the time of the Liverpool and Manchester Railway—think of the rails first laid down on that grand experimental line, only thirty-five lbs. to the yard, what a complete failure!—remember, also, numerous other defects, which at first were not detected, yet by daily experience were soon found out and remedied. The destruction of the rails exposed to the alternations of weather is prevented by the application of Payne's, Burnett's, and other processes. The rails laid down on Wimbledon Common are six inches square, notched on to cross sleepers of the ordinary scantling, and keyed thereto; the ends of the rails are doweled together, the ballasting is filled to the top of the rails on the outside, but on the inside sufficient depth of rail is left for the passage of the guide-wheel inner flange. The chief part of the way is laid with wooden rails, but in order to demonstrate the easy transition of the train from wooden to iron rails, or vice versa, the middle part is laid with iron. With regard to the economy of the system, it is only necessary to add the following:—The cost of iron rails may be stated in round numbers, 2000£ per mile, while that of wooden rails is not more than one-half that sum, added to which, a very considerable additional saving is effected by the introduction of third-class gradients, for which wooden rails are much more suitable than those of iron.

We strongly recommend those railway engineers and directors, who have not already visited the Wimbledon Railway, to lose no time in doing so, in order that they may be enabled to judge for themselves of the great advantages of Prosser's system, by which economy, both in first cost and annual expenditure, is effected to so great an extent.

GREAT MANCHESTER, RUGBY, AND SOUTHAMPTON RAILWAY.

WITH A DIRECT LINE FROM DERBY TO RUGBY.

(Provisionally Registered, pursuant to the 1 and 6 Victoria, cap. 110.)

Capital £3,000,000, in 150,000 shares of £20 each.—Deposit £2 2s. per share.

The Right Hon. Lord Viscount Cobham, G.C.B., G.C.H., &c., 48, Belgrave-square
The Right Hon. Lord Thomas Pelham Clinton, 16, Carlton-villas, Maida-vale
The Right Hon. George R. Dawson, director of the Jersey Railway
The Hon. Cecil Lawless, Lyons Castle, Kildare, and 63, St. James's-street
Thomas Batson, Esq., M.P. Albany, and Belvoir Park, County Leicestershire
Major-General Parly, C.B. Rutland-gate, Hyde-park
Sir Andrew Fellatt Green, R.N., K.C.B.
H. J. Enthoven, Esq., Moorgate-street, director of the Dutch Rhenish Railway
William Watson, Esq., Directors of the Bristol and Exeter and the North Devon Railways
C. R. Colman, Esq., Iron Gate Wharf, London, director of the South Midland and Junction Railway
Anthony Dickson, Esq., Edington House, Berwickshire, late Physician-General of Bengal
William Shadwell, Esq., Croome-on-Hill, Greenwich, chairman of the Greenwich Railway, and director of the Dendre Valley Railway
Samuel Ellis Bristow, Esq., Twyford Hall, near Derby, director of the Tees and Dove Valley Railway
Frazer B. Henshaw, Esq., Lower Seymour-street, Portman-square, director of the Liverpool, Manchester, and Newcastle-upon-Tyne Railway
William Watson Prole, Esq., Thurloe-square, Brompton, director of the Jersey and South Midlands Junction Railway
John Inglis Jervell, Esq., 150, Piccadilly
David Montague, Esq., Regent's-park
Grey Hazlerigg, Esq., West Coriten Hall, Leicestershire, director of South Midland Rly.
Benjamin Franklin, Esq., 5, Harley-street, Cavendish-square
Jonas Wilks, Esq., Walling-street, London
William Morley, Esq., Blackheath, Kent, director of the Newcastle, Durham, and Lancashire Junction Railway
Henry R. Downman, Esq., Kidwelly, Carmarthenshire, and 47, Upper Bedford-place
Robert Chapman, Esq., Coomb Lodge, Hants, and Park-place, Regent's-park
James Reeves, Esq., Cheapside, and Leyton, Essex
Major White, Pall-mall, director of the Northampton and Cheltenham Railway
John Downes, Esq., 6, Bedford-place, Russell-square
Alfred Ricketts, Esq.
William Lee, Esq., Satis House, Rochester
John Hardcastle Mousley, Esq., Derby
John Bowring, LL.D., M.P. director of the Blackwall Railway
Ambrose Moore, Esq., Milk-street, London, and of Derby, director of Dendre Valley Rly.
Henry Wright, Esq., director of the Warwick and Worcester Railway
James Hitchins, Esq., Coroner of Lincoln, director of the Warwick and Worcester Railway
James Russell, Esq., Gloucester-place, Portman-square, director of the London and Birmingham Junction Railway, and of the Tring, Reading, and Basingstoke Railway
John Weston, Esq., 28, Woburn-square
Edward Webster Bullock Webster, Esq., Hendon, Middlesex, director of the New River Company
James Hunt, Esq., 31, Parliament-street
James Lys Seager, Esq., director of the Welsh Midland, and Shrewsbury and Hereford Railway
Edward Turtz Carver, Esq., Forest Lodge, Tulse-hill, director of the North Wales and Namur and Liege Railways
William de Lannoy, Esq., 42, Guildford-street, Russell-square
Archibald F. Paull, Esq., Leadenhall-street, director of the South Wales Railway
William H. Allen, Esq., Leadenhall-street
J. Mattheus, Esq., Mecklenburgh-square, director of the Derby, Sheffield, and Worcester Railway
Burton Archer Burton, Esq., Woodlands Hall, Emsworth, Hants
John Rawson, Esq., Stoney Rold, Halifax, a Deputy-Lieutenant of the county of York
John S. Silva, Esq., Crutched-friars
Charles James Heath, Esq., London-street
Frederick Clarkson, Esq., Doctors' Commons, and Hanger-lane, Tottenham
James Pearly, Esq., Seaton Iron-Works, Whitechapel
John Saunders, Esq., Derby, director of the Derby and Crewe, and Erewash Valley Rlys.
Thomas Hackett, Esq., merchant, Derby
Mr. Herbert Holmes, carriage-builder, Derby
BANKERS IN LONDON.—Messrs. Glyn, Halifax, Mills, and Co.; and the London Joint-Stock Bank.

The commercial advantages and great facilities which the port of Southampton offers to the merchant and the manufacturer, clearly point out a demand for a more direct communication with it from Manchester and York, and the various manufactoryes of the north and of Staffordshire, than is at present afforded, either by the circuitous route on the eastern side, through London by the Birmingham and the South-Western Railways, or on the western side, by the Birmingham and Cheltenham Railways. Numerous influential and moneyed parties, interested in improving this communication, have projected a direct line, proceeding from Manchester via Stockport, Macclesfield, Leek, Cheshire, Uttoxeter, Tupton, Burton, Market Bosworth, and Hinckley, to Rugby, and then using the Rugby and Oxford Railway to Didcot (or the Great Western Railway), to form a railway thence to Southampton by way of Newbury, Andover, and Stockbridge.

The distance between Manchester and Rugby by the existing railway route is at present about 116 miles, and by the proposed line from Macclesfield to Rugby it will be only ninety-two, so that the projected railway will lessen the distance by twenty-four miles, which, as well in time as charge, will effect a most important improvement in the traffic both of passengers and goods between those places, and will afford an accommodation which is imperatively required in regard to the large population of the intermediate towns now without any convenience from railway conveyance.

It is needless to remark how great must be the advantage which the whole manufacturing districts round such an emporium of manufacture as Manchester will derive, from having direct access to such a port as Southampton, which has now become the chief medium of transit to all the islands and ports in the Mediterranean, and to India also, by means of the packets of the Peninsular and Oriental Steam Navigation Company, as also to the colonies and ports of the western hemisphere by the mail packets established for that purpose.

As the scheme embraces the important feature of a direct line from Derby to Rugby, by joining the Great Manchester, Rugby, and Southampton Railway, near Market Bosworth, thereby saving one-fifth of the distance, it will be at once apparent that York and the whole northern district will, by means of the Northern Midland Railway to Derby, obtain the same direct communication with Southampton; and, in fact, the project will contribute a grand trunk communication from north to south through the centre of the kingdom, and not only will the northern commercial and manufacturing towns benefit by this great undertaking, but the important coal and iron districts of Derbyshire and Staffordshire, which the line intersects, will derive immense advantages from the convenient and extensive new mart which will be opened for their valuable productions, whilst Southampton and the intermediate localities will greatly benefit by the ready and cheap manner in which coals and other necessary productions, not only of the soil, but of northern manufactoryes, will be supplied, whether for consumption or merchandise.

It is proposed that the Southampton terminus shall be at a convenient spot in the vicinity of the new docks, independently of the South-Western Railway. The lines of the proposed railways have been carefully surveyed, and levels taken by skilful engineers and surveyors, and in no part present any unusual difficulties. The gradients will be unusually good, and the general line of country may be regarded as offering engineering facilities for the important work proposed. A more direct communication from Manchester and from York, through Derby and Rugby to Southampton, is professedly the main object of the proposed scheme; but it will be obvious to all who study the geography of the respective places, not only that the line to Rugby, both from Manchester and from Derby, forms a more direct communication between those places and London, by means of the Birmingham Railway from Rugby, than any other route now in use, but that it will challenge the skill of the engineer and the ingenuity of the speculator to devise a better line. It is no slight advantage in this scheme that the interference it offers to any of the existing railways is not considerable, whilst the increased traffic which it is certain to cause on the North Midland Railway, and the traffic which it is calculated to retain to the London and Birmingham Railway, notwithstanding the threatened rivalry of two distinct Manchester and London direct lines; as also the immense traffic both of passengers and goods which it must necessarily pour along the Rugby and Oxford line, now under the management of the Great Western Railway Company, appear not only to neutralise the opposition, but to entitle this project to the support of each of those formidable bodies.

It appears unnecessary in regard to a line of railway like that proposed, to go into those details of passenger and goods' traffic, which may be necessary where the amount is questionable; but as the main feature of this scheme is the improvement of communication between, and near places, the traffic of which is known to be immense, it would be idle to swell the prospectus with any such particulars. It is sufficient to state that it will be equal to that of any line in the kingdom. The subscribers will be only liable to the extent of their deposits; and power will be taken to allow the shareholders 4 per cent. on the deposit and calls until the opening of the line.

The names of the committee of management and officers of the company will be published in a few days; and, in the meantime, any further particulars may be obtained from, and all communications addressed to, the company's solicitors, Messrs. Thompson and Debenham, Salters' Hall, St. Swithin's-lane, London, and also to Mr. H. Pritchett, stockbroker, No. 74, Old Broad-street, London, applications for shares, in the form annexed, may be made.

FORM OF APPLICATION FOR SHARES.

To the Provisional Committee of the Great Manchester, Rugby, and Southampton Railway, with a Direct Line from Derby to Rugby.

Gentlemen,—I request that you will allot to me shares, of £20 each, in the above railway, and I hereby undertake to accept the same, or any less number you may allot me, and to pay the deposit of £2 2s. per share thereon, and to sign the Parliamentary contract and subscribers' agreement when required.

Dated this day of September, 1845.

Name in full Business or profession Signature
Place of business or profession Residence Name, residence, and profession of referee

SHROPSHIRE MINERAL RAILWAY, FORMING, IN CONJUNCTION WITH OTHER EXISTING AND PROJECTED LINES.

A DIRECT COMMUNICATION BETWEEN

LIVERPOOL, MANCHESTER, SHEFFIELD, YORK, AND HULL, AND SWANSEA AND SOUTH WALES.

PROVISIONALLY REGISTERED.

Capital £700,000, in 35,000 shares, of £20 each.—Deposit £2 2s. per share.

The deposit is in accordance with the Standing Order of the House of Commons.

PROVISIONAL COMMITTEE.

Adams, Mr. Sergeant, Stanhope-place, Hyde-park

Baddiley, Thomas Bernard, Esq., Newport, Salop

Baines, James, Esq., ironmaster, Great Bridge, Staffordshire, director of the South Staffordshire Railway

Barker, Joseph, Esq., Macclesfield

Beddoes, Thomas, Esq., Cheltenham Longueville, near Church Street

Beaumont, Captain, Kensington-square

Blanford, William, Esq., chairman of the Thames Plate-Glass Company

Bloor, John, Esq., merchant, Tuthbury, Suffolk

Bull, Joseph, Esq., Shodsbury Iron-Works, Shropshire, and Manchester

Burrowes, Captain, Davies-street, Berkeley-square

Clarke, Jeremiah, Esq., Macclesfield and London, director of the Direct London and Manchester Railway

Cochrane, T., Esq., ironmaster, Woodside Works, Wolverhampton

Cox, George, Esq., Wolverhampton

Cottam, Rev. G. M. A. Wolverhampton

Clemson, John, Esq., Red Bank, Manchester

Davies, Captain, J. P., Bringlass, Montgomeryshire

Davies, Thomas, Esq., ironmaster, Goldshill, near Iron Woods

Deakin, Addison, Esq., Eccleshall

Downes, Thomas R. C., Esq., Macclesfield, near Ludlow

Edwards, Edward, Esq., Iron-bridge, Shropshire

Evans, Thomas, Esq., Clun, Shropshire

Evansbank, Captain, Junior United Service Club

Eyke, William, Esq., Stanton, Shropshire

Farnstone, John Parsons, Esq., ironmaster, Highfields Works, Bilton, director of the South Staffordshire, Worcester, and Shrewsbury Junction

Fisher, James, Esq., ironmaster, Bilton, Staffordshire

George, William, Esq., Weston, near Much Wenlock

Griffiths, Samuel, Esq., Wolverhampton

Gregory, T., Esq., ironmaster, West Bromwich, Staffordshire

Hall, Joseph, Esq., ironmaster, Bloomfield, Tipton, Staffordshire

Helecombe, Charles T., Esq., Valentine, Biford, Essex, director of the Anglo-Belgian Railway

Humphreys, William, Esq., the Rectory, Berriew, Welsh Pool, Montgomeryshire

Humphreys, John, Esq., Berriew, Welsh Pool, Montgomeryshire

Humphreys, Rev. Thomas, Bishop's Castle

Jones, Robert, Esq., Stretton, near Church Street

Lambert, Richard, Esq., Leyton Hall, near Sudbury, Suffolk

Law, William, Esq., Woburn-place, Russell-square

Leicester, Rev. Charles, J. P., Whitton Hall, Salop

Leveridge, Henry, Esq., Wolverhampton

Lockcock, Rev. T. G. M., Parsonage, Great Bar, Staffordshire

Marston, Francis, Esq., J. P., Aston, Hopesay, Salop

Miller, Ambrose, Esq., Lower Thames-street, director of the Oxford, Witney, and Cheltenham Railway

Millington, William, Esq., ironmaster, Summer Hill Works, Tipton, Staffordshire

Minton, John, Esq., Cleobury North, Shropshire

Newcombe, J. W., Esq., Upper Gloucester-place, and Langley Fields Iron Works, Dawley, Salop

Plowden, William, Esq., Plowden Hall, near Bishop's Castle, and Rotherwas, near Hereford, J. P., Shropshire

Price, Francis Lysons, Esq., William-street, Blackfriars, director of the Chartered Gas-light and Coke Company

Pulteney, Captain Douglas, Kinneir, Parliament-street, director of the Direct London and Manchester Railway

Ridge, John Charles, Esq., merchant, Manchester

Rigg, Charles M., Esq., York-place, Portman-square

Riley, W. T., Esq., ironmaster, Millfield-works, Bilton, director of the Derbyshire, Staffordshire, and Worcester-shire Junction Railway

Ryton, Wm. Esq., Wolverhampton

Shaw, William, Esq., managing director of the Royal Farmers' Fire and Life Assurance Company, and director of the London and Birmingham Extension, and Warwick and Worcester Railways

Silvester and Jackson, Messrs., ironmasters, West Bromwich

Simms, William, Esq., Shodsbury Iron-works, Shifnal

Slade, the Rev. H. H., D.D., Wolverhampton

Smaleman, John, Esq., J. P., Quatford Castle, Bridgnorth, director of the Worcester and Crewe Railway

Spicer, Charles W., Esq., Portman-square

Summers, Thomas, Esq., Much Wenlock

Swift, Henry, Esq., Eccleshall and Wootton

Thacker, Robert, Esq., Wolverhampton

Tildesty, James, Esq., merchant, Wirksworth, Staffordshire

Tudor, Samuel, Esq., Upper Thames-street, and Hull, director of the Derby, Stafford and Uttoxeter Railway

Turner, Henry, Esq., Bawdon Hall, Staffordshire

Underhill, George, Esq., ironmaster, Wolverhampton

Wainwright, Richard, Esq., Stanway Court, Church Street

Webster, Frank D., Bullock, Esq., director of the New River Company, Brent-bridge-house, Hendon, Middlesex

Wells, Thomas, Esq., ironmaster, Moxley Steel-Works

Weyman, Thomas, Esq., Pavillion-hall, near Clun, Shropshire

Wood, William, Esq., Chetwynd-hall, Newport, Salop, director of the Derbyshire, Staffordshire, and Worcester-shire Railway

Woolryche, Stephen, Esq., J. P., Quatford Villa, near Bridgnorth, Salop

(With power to add to their number.)

BANKERS.

Messrs. Jones, Loyd and Co., Lothbury, 3, London

Messrs. Cockburn and Co., 4, Whitehall, London

Messrs. Adams, Warren, and Co., Shrewsbury and Market Drayton

The Bilton District Banking Company, Wolverhampton

The Shropshire Banking Company, and its branches

ENGINEER-IN-CHIEF—Samuel Clegg, Esq., C.E.

ACTING ENGINEER—Francis Briscoe, Esq.

SOLICITORS.

Messrs. Yarborough and Adams, Lincoln's Inn-fields, London

E. Garbett, Esq., Wellington, Salop

LOCAL AGENTS.

Messrs. G. and R. Anderson, Ludlow

Thomas Weyman, Esq., Ludlow

John William Butterton, Esq., Eccleshall

Thomas Bernard Baddiley, Esq., jun., Newport

Edward Edwards, Esq., Church Street

Gilbert Brown, Esq., Shifnal

Charles G. Brown, Esq., Bilton, Staffordshire

Philip Octavius Jervis, Esq., Bishop's Castle

Thomas Griffiths, Esq., Clun and Bishop's Castle

Thomas Walker, Esq., Wolverhampton

T. R. T. Hodson, Esq., Birmingham

William Harding, Esq., Burslem, Staffordshire Potteries

SECRETARY—George Bond, Esq.

Offices, Royal Exchange-buildings, London.

The line of railway intended to be constructed by this company, will commence at or near Norton-bridge (a station of the Grand Junction Railway), in the county of Stafford, and proceed from thence by Eccleshall, Offley, Norbury, Forton, Newport, Domington Wood, Oaken Gates, Priors Lee, Stinchley, Dawley, Madeley, and Iron-bridge, to Colebrook Dale; there, crossing the proposed "Worcester and Crewe Railway," it will pass along the slope of Wanlock Edge, by Rushbury and Eas-ton-under-Haywood, to Wistanstow, in the county of Salop, where it will run into, and form a junction with, the "Shrewsbury, Hereford, and North Wales Railway."

The line will traverse a rich mineral district, and will have a secure and extensive traffic by the carriage of coal from the Shropshire coal-field, to a depot proposed to be formed at Wistanstow, for the supply of South Shropshire, part of Radnorshire and Herefordshire, and also from whence it will be conveyed by the "Hereford, Shrewsbury, and North Wales Railway," into Montgomeryshire and the neighbouring counties, where coal does not exist. It is impossible to calculate the extent to which this traffic may be carried, as by the direct railway communication thus opened between the Shropshire coal-field, and the important manufacturing towns of Newtown and Llanidloes, the price per ton will be reduced one-half at those places, and the flannel manufacturers, now depending upon water power, will, by the cheapness of coal, be enabled to employ steam, and to extend their trade in proportion to the great demand which exists for the Welsh flannels, in preference to any other. The importance of this subject will have its due weight with those who so often witness the bad effects upon the trade, caused by the stoppage of the mills from an insufficiency of water.

A considerable amount of tonnage is now incurred by the Shropshire ironmasters, for the conveyance of limestone from the neighbourhood of Much Wenlock to the furnaces, by several transits of land and water carriage, whereas the proposed railway will convey it direct into the heart of the works, and at one-third of the expense.

By its junction with the "Grand Junction" and the "Hereford and Shrewsbury" Railways, this line will form a direct communication between Liverpool, Manchester, Sheffield, York, and Hull, and Swansea and South Wales.

As a junction line alone (connecting as it will such important railways), a large passenger traffic may be depended upon; but, when it is considered that the centre of the line passes through a densely-populated mining district, and the remainder through a thriving agricultural neighbourhood, it will be obvious that a sufficient local traffic exists to pay a highly remunerative interest on the amount of capital required to be embarked.

The line, which will not interfere with any property of an ornamental or costly character, will not exceed forty-six miles in length, and will be constructed at much less than the average cost.

Such important local co-operation has been secured, that no opposition is anticipated or can be sustained against the measure.

The liability of the shareholders will be limited, by the Act, to the amount of their subscription to the capital stock; and power will be applied for to allow interest at the rate of 4 per cent. per annum on the amount of the deposit, and upon the further calls, from the date of each payment until the opening of

the line; and the first deposit being paid, a further call will not be made until the Act of Parliament shall have been obtained.

Maps of the line, prospectuses, &c., are to be obtained from the secretary, the solicitors, the local agents; also the brokers, Messrs. Mieville and Co., Angel-court, Throgmorton-street, London; Messrs. Cameron, Cazenove, and Taunton, Liverpool; Messrs. Green and Oldham, Manchester; Nathaniel Lee, Esq., Birmingham; Messrs. Sohnes and Tripp, Bristol; Messrs. Turley and Cooper, Leeds; J. Senior, Esq., Sheffield; Messrs. Brady and Staniforth, Hull; to whom applications for shares (which must be on printed forms) may be addressed, and it will be necessary that reference be made to a banker, solicitor, or person of responsibility.

CAMBRIAN AND GRAND JUNCTION RAILWAY,

CONNECTING SOUTH WALES WITH BIRMINGHAM, LIVERPOOL, MANCHESTER, AND THE NORTH.

(REGISTERED PROVISIONALLY.)

Capital £2,900,000, in 110,000 shares, of £20 each.—Deposit £2 2s. per share.

PROVISIONAL COMMITTEES.

LOCAL

St. John Cheverton Charlton, Esq., Apley Castle, Wellington, High Sheriff of the county of Salop

Richard Corbet, Esq., Adderley Hall, Salop

Edmund Burnet Peto, Esq., Alichamore, Herefordshire

George Cross, Esq., Buxton House, Herefordshire

John Kerr Holdings, Esq., manager of the Herefordshire Banking Company

William Webb, Esq., Mayor of Hereford

William Pullinger, Esq., merchant, Hereford

Charles Bulmer, Esq., merchant, Hereford

The Rev. W. Cooke, Esq., Bromyard, and Elm-court, Temple, London

Mr. George Griffiths, corn factor, Bewdley

John Watson, Esq., carpet manufacturer, Kidderminster

George Crump, Esq., carpet manufacturer, Kidderminster

George Butcher, Esq., Kidderminster

Thomas Whitmore, Wyke Browne, Esq., Woodlands, near Bridgnorth, magistrate of the county of Salop, and of the borough of Bridgnorth

John Baker, Esq., Dolforwyn Hall, Montgomeryshire, and Bridgnorth

W. McMichael, Esq., magistrate of the borough of Bridgnorth

John Trevor, Esq., Clerk of the Peace for the borough of Bridgnorth

John Jacob Smith, Esq., Town Clerk of the borough of Bridgnorth

The Rev. J. F. Willett, Cams Hall, Bridgnorth

William Grierson, Esq., The Grove, Bridgnorth

J. M. Coley, Esq., M. D., Bridgnorth

Joseph Hall, Esq., Bridgnorth

William Thursfield, Esq., Bridgnorth

John Dallaway, Esq., Bridgnorth

John Phillips, Esq., Bridgnorth

John Green, Esq., Badger Heath, near Bridgnorth

Joseph Southwell, Esq., carpet manufacturer, Bridgnorth

Thomas Grierson, Esq., carpet manufacturer, Bridgnorth

John Onions, Esq., Broseley

Richard Boycott, Esq., banker, Broseley

John Stephens, Esq., Albynes, near Bridgnorth

William Wyley, Esq., The Vineyard, Wellington

Messrs. Welsh, Wellington

John Williams, Esq., ironmaster, Ketley, Wellington

Mr. John Slaney, Wellington

Mr. John Beeston, Wellington

John Waltham Hammond, Esq., Wistanstow Hall, near Nantwich

Joseph Loyd, Warren, Esq., The Lodge, Market Drayton, and Consall Hall, Staffordshire

Charles Warren, Esq., banker, Market Drayton

John Edward Wilson, Esq., The Grove, Market Drayton

Rev. S. H. Macaulay, Hodnet Hall, Salop

Thomas Nathaniel Webb, Esq., the Vineyard, near Hereford

James Beech, Esq., The Shaw, near Chedde

Samuel Ellis Bristow, Esq., Twyford House, near Derby

Peter Broughton, Esq., Tunstall Hall

BRIDGWATER AND MINEHEAD JUNCTION RAILWAY

COMPANY.

UNITING THE BRISTOL AND ENGLISH CHANNELS.

And forming a direct communication between the south of Ireland and Wales, with Bristol and London, and also with the south-eastern and western coasts of England, Paris, and the Channel Islands.

(PROVISIONALLY REGISTERED.)

Capital £300,000, in 15,000 shares of £20 each.—Deposit £2 2s. per share.

Ability expressly limited to the amount of subscription, and it is intended to make no further call until the Act of Parliament is obtained.

PROVISIONAL COMMITTEE.

Sir Henry Seale, Mount Broom, Dartmouth

Sir John Hansler, F.R.S. Walton, near Safron Walden, Deputy-Lieutenant of the county of Essex

Colonel Luttrell, Klive-court, near Minehead, Vice-Chairman of the Somerset Quarter Sessions

John Halliday, Esq. Chapel Cleeve, near Minehead, Magistrate of the county of Somerset

Henry William Chichester, Esq. Rose House, Bampton, Devon

R. Beeson Buller, Esq. Nether Stowey, Somerset

Edwin Ley, Esq. Penzance, Cornwall

The Mayor of the town and county of Poole

Richard Pinney, Esq. shipowner, Poole

E. F. Dayrell, Esq. of Lillingtons Dayrell, and 15, Old Cavendish-street, London, High Sheriff of Buckinghamshire

W. S. Fitzwilliam, Esq. Pinner's-hall, Broad-street, merchant

W. Revel Viger, Esq. 50, Russell-square, and Alderman's-walk, merchant

W. S. Potter, Esq. Sussex-gardens, Hyde-park

James Morrison, Esq. 28, St. Mary-at-hill, merchant

James Colhoun, Esq. 5, Half-Moon-street, Piccadilly, and St. Peter's Chambers, Cornhill, merchant

Samuel Pocock, Esq. Bloomsbury-square, and St. Bride's Wharf

Anthony Mervyn Storey Maskelyne, Esq. Gasum House, Breconshire

F. W. Green, Esq. shipowner, Cornhill

W. F. Beeson, Esq. 11, John-street, Berkeley-square

W. Strachan, Esq. banker, Strand

OFFICE, 3, ALDERMAN'S WALK, NEW BROAD-STREET.

SOLICITORS.

Messrs. A'Beckett, Son, and Sympon, 7, Golden-square.

Mr. Vaughan Prance, Nether Stowey and Bridgewater.

MANAGING DIRECTORS.

E. F. Dayrell, Esq. James Colhoun, Esq.

W. R. Viger, Esq. W. S. Potter, Esq.

W. S. Fitzwilliam, Esq. Samuel Pocock, Esq.

W. F. Beeson, Esq. James Morrison, Esq.

F. W. Green, Esq.

SECRETARY—Mr. Edward Parratt.

BANKERS.

Messrs. Strachan and Co., and Messrs. Roberts and Co. London

Messrs. Stuckey and Co. Bristol, Bridgewater, and Taunton

Messrs. Badcock, Taunton and Dunster

One of the principal objects this company has in view is a great saving of time in the journey from Ireland and South Wales to Bristol and London, by avoiding the tedious and dangerous passage of the Bristol Channel, and at the same time effecting the long sought for communication between the English and Bristol Channels, all of which will be gained by connecting Minehead with Bridgewater by a railway, and there forming a junction with the railways already opened, and also with those now in actual progress between Bridgewater and the commodious and important port of Poole. The question of an eligible steam-packet and post-office station on the Somersetshire coast for Ireland, Wales, and the westward generally, from whence vessels may arrive and depart at all times, without reference to tides, has for many years past been regarded as one of immense importance to the Government and the public.

By making Minehead a post-office station, a saving of thirteen hours will be effected in the delivery of letters between Ireland and the whole of the west and south of England; and no other port on the coast of Somerset, or even on the north of Devon, will be so safe and sheltered from all the prevailing winds. At Minehead the proposed railway will run down on a pier, which the largest class steamers may approach and land and embark passengers at all states of the tide, and again proceed at once into the Western Ocean on their outward voyage. The public is perhaps hardly aware that, even with the present imperfect and rude arrangement for landing passengers at Weston-super-Mare, it is found that passengers from Ireland and the important ports of the south of Wales save several hours by landing at that place; whereas by the proposed pier and railway from Minehead, passengers would save generally twelve hours, and very often a great deal more on their journey to London, avoiding besides the dangers of the Bristol Channel. It is not among the least striking features of this project that it forms part of a grand scheme for shortening the communication between Ireland and Wales with Jersey, Guernsey, Paris, and the continent generally, as passengers landed at Minehead will proceed by this railway to others now in progress, via Exeter and Dorchester to Poole, from which port the distance to Cherbourg is only sixty miles; thus rendering the distance from Minehead to Cherbourg easily performed in eight hours and a half; and from Cherbourg a railway is now in course of formation to Paris. The distance also to the Channel Islands is reduced in the same proportion. A powerful company, fully alive to the advantages of this mode of transit, in preference to the more tedious one via Southampton and Havre, is about to put on a line of packets between the ports of Poole and Cherbourg and the Channel Islands, thus shortening the route in point of time by about seventeen hours.

This company, in showing to the public the probable amount of traffic which will flow over their line, beg leave to draw attention to the following extracts, taken from a prospectus of a company formed under the auspices of the chairman of the Great Western Company, and the leading bankers and merchants of Bristol, for making a pier at, and railway from, Portbury to Bristol, and on which no further comment will be made, save that whatever applies to Portbury applies with infinitesimal greater force to Minehead, both in the saving of time, danger, delay, and expense. "There are at the present time engaged in the trade with South Wales, Somersetshire, Devonshire, Cornwall, Liverpool, and Ireland, twenty-three steam-vessels of the aggregate tonnage of upwards of 6000 tons—making rather better than fifty voyages, or 100 arrivals and departures per week on an average throughout the year. The principal part of the traffic of the whole of these vessels consists of passengers, whilst of their goods' traffic, an important portion consists of merchandise brought by, and intended for, carriage on the existing railways, from and to places on either side of Bristol. For the conduct of this traffic, every vessel will necessarily require to use the pier and railway on each occasion of departure and arrival, as the most expeditious, convenient, and economical mode of conveying such traffic to or towards its place of destination. The number of passengers carried by the existing steam-boats amounts to at least 200,000 per annum, and when it is considered that the facilities afforded by the pier of starting and arriving at all times of the tide will enable vessels which now perform but one voyage per diem, or every alternate day, to and from the nearest ports in South Wales, to make such voyages three or four times in the same day, at very trifling, if any additional cost—that on the voyages to Swansea, Tenby, and Ilfracombe, they will effect a saving of one-half the time now occupied, and that similar advantages will be derived by the trade with Cornwall and Ireland, it can neither be doubted that the expense of conveyance between Bristol and these places will be considerably reduced, nor that the effect of such reduction, combined with the advantage of greater certainty as to the times of departure and arrival must have the effect of causing a great increase in the number of passengers. A large and most valuable portion of the merchandise carried by the Cornish, Welsh, and Irish steam-boats, consist of fish, poultry, eggs, vegetables, and other articles of provision; speed and certainty in the conveyance and delivery of articles of so perishable a nature are obviously essential, and the facilities in this respect afforded by the pier are such as to secure this traffic to the undertaking. A very considerable revenue will also be derived from the landing and carriage of live stock brought by the Irish steam-boats, which being imported fat and ready to kill now suffer much injury from the detention in Kingroad whilst waiting for tide."

Although it is unnecessary to calculate upon the whole of this important and justly founded traffic, it is, nevertheless, impossible to over estimate the large portion of it that will come over this line, when it is remembered that by the proposed scheme the harbour of Waterford will, by means of powerful steamers, be brought within twelve, and the ports of Dublin and Cork within fifteen hours of the terminus at Minehead, by which the danger, inconvenience, and unpleasantry of travelling by night will be altogether avoided. So also must the traffic derived from steam-boats, and on the line itself, be added, which will arise from the immense resort of persons seeking pleasure in the beautiful vicinities of Nether Stowey, Blue Anchor, Minehead, Porlock, Linton, Lynmouth, and the far-famed Valley of Rocks and adjacent country, so aptly termed the Switzerland of England, and which only require increased facilities to be much more than even at present resorted to; and a great is the existing traffic that, by the calculations already made, a large revenue will be derived from this source alone.

The present number of cattle sent to Bristol from Ireland alone is upwards of 150,000 head per annum, and it is only reasonable to expect that these will be landed at the far nearer port of Minehead, thereby creating a considerable source of revenue. The importance of this railway to the agricultural districts of North Somerset is incalculable for disseminating, as manure, in every direction, the celebrated lime of Cannington-park, from which, and also from the carrying of coal, a large revenue will arise.

Mam timber brought into the port of Poole (the harbour dues of which are very insignificant) can be unshipped, carried across by rail, and re-shipped at Minehead, at a cost of 7s. per ton less in freight than if carried round the Land's End, exclusive of the great saving in time; this alone will open a large trade with Wales, as vessels will bring over coals to Minehead, and take back timber, limestone, flour, mine, slate, and copper ore. The blue lias limestone of Watchet, so admirably adapted for aquatic building, will also produce a considerable revenue to this undertaking. The flour and provision trade at present carried on between the mining districts of South Wales and the coast of Somerset must necessarily flow over this line, and create an important feature in its revenue. One of the first effects of the formation of this line will be, that steam communication will be established between Minehead and the following

places:—Swansea, Tenby, Milford, Neath, Haverfordwest, Pembroke, and Carmarthen, and with the whole of the south of Ireland; and this railway, with a suitable station and wharfs, will also afford to Watchet all the advantages of which it is capable as a port.

Depôts for goods will be erected at the station at Combwich Reach, where at present all the larger vessels trading to Bridgewater stop; and it may be mentioned that 130,000 tons of coasting trade come into this port annually, exclusively of 10,000 tons of foreign trade. From the estimates prepared, it is expected that only a portion of the proposed capital will be required to carry out the objects of this company. Power will be reserved to allow the shareholders £4 per cent. on the paid-up capital, and also to construct branches from Minehead or Watchet to Wiveliscombe, Porlock, &c., and the extensive iron mines of Sir T. Buckler Lethbridge, Bart., which, with the slate quarries of Sir John Trevylyan, are in active working within seven miles of Minehead. From this source, as also from the copper mines of Andrew Crosse, Esq., a large revenue must arise. The landowners have been communicated with, and are most anxious for the successful carrying out of the objects of the company; nor is there reason to expect that any Parliamentary opposition will be offered.

The line will be twenty-five miles in length, and no engineering difficulties present themselves. Until an Act of Parliament shall be obtained, the affairs of this company shall be under the control of the managing directors, to whom power is given to allot the shares, and to apply the funds of the company in payment of all the expenses incurred in its formation, and in the preparation of the plans and sections to be submitted to Parliament. Power will be applied for in the Act, and, in the meantime, is hereby given to the managing directors as above, to raise any additional capital, to abandon any part of the line, to make branch lines, docks, piers, wharfs, or jetties, or enter into any arrangement with any other company or companies, and also to nominate the first directors of the company.

Applications for shares, plans, prospectuses, and detailed information, may be made at the offices of the company, No. 3, Alderman's-walk, City, London: at the offices of the company's solicitors, Messrs. A'Beckett, Son, and Sympon, 7, Golden-square, London: Mr. Vaughan Prance, Nether Stowey and Bridgewater: and of the local agents:—Mr. William Woodland, solicitor, Taunton: Mr. N. Pearce, solicitor, Wiveliscombe: Mr. James Parsons, solicitor, Langport: Messrs. Stone and Symonds, solicitors, Dorchester: Mr. Thomas Phippard, solicitor, Wareham: Mr. K. Welch, solicitor, Poole: Mr. Henry Poole, solicitor, Bristol: and of the following stock and sharebrokers:—Messrs. Tucker, Barnett and Ellis, 11, Bircham-lane: and Messrs. Huggins and Lang, London: Messrs. Hall Brothers, and Co., Cheltenham: Mr. John Morcom, Bristol: Mr. Thomas Evans, Bath: Mr. Charles O'Neil, Manchester: Messrs. H. Davies and Co., Liverpool: Messrs. Chantrell and Boys, Leeds: Messrs. Wilkinson and Co., Hull: Messrs. Labertouch and Stafford, Dublin: Mr. Lilly, Bridgewater: and Mr. R. Ball, Taunton.

BRIDGWATER AND MINEHEAD JUNCTION RAILWAY.

Notice is hereby given, that no application for shares will be entertained, unless the same be made in the form prescribed by the managing directors, and the applicants must also refer either to one of the provisional committee, or to some person of known respectability.—Dated Sept. 12, 1842.

By order,

Messrs. A'BECKETT, SON, & SYMPSON, 3, Solicitors to the

Mr. VAUGHAN PRICE, Company

Office, 3, Alderman's-walk, Old Broad-street.

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135